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A Study Re High School Graduation Requirements

By R. Warren

February 1975

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A STUDY
RE
HIGH SCHOOL GRADUATION
REQUIREMENTS

By R. Warren
November, 1974

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FOREWARD

The author of this report is charged with the full responsibility of making recommendations to the Alberta Department of Education on the subject of the Alberta High School Diploma. He is charged also with the responsibility of obtaining opinions not only from those directly involved in formal education, but from those organizations whose activities for youth parallel and/or coincide with those of the secondary schools.

In many reports built from disparate ingredients, the opinions of the responsible author or co-ordinator are integrated with those of the various groups consulted, and the reader is at a loss to know what the individual groups or organizations did contribute or recommend. The reader thus loses the opportunity to adjudicate between the author's biases and opinions and those of the various publics consulted.

Since this paper will be the basis of discussion prior to the determination of policy by the Department of Education, I have chosen to give the readers, in summary form at least, the opinions expressed on behalf of the various groups. Where summaries were available, I have presented them verbatim. In other cases, I have summarized as faithfully as I could, the content of the briefs. Tedious as this procedure may be, I believe it will best suit the purposes of this paper.

Those who responded to the invitation to submit briefs were given the option to respond to all questions raised, or simply to those in the area of their involvement or interest. One complete group; i.e. the organizations sponsoring school-related, but non-school-supervised activities were asked to specifically respond to the question as to whether there should be an extension of school credits to achievement in their youth activities.

Not all who were invited to respond did so. Since they were fully informed as to the nature of the study, their failure to respond must be interpreted, not necessarily as a lack of interest, but as having no strong convictions about the questions raised.

R. Warren
November, 1974.

ACKNOWLEDGEMENTS:

It is difficult to find a time most appropriate for those engaged in educational activities to give some thought to problems raised by agencies and investigators external to the institution. This particular survey took place at a time when universities and colleges were about to end their winter sessions. As a result difficulties were encountered in getting formal meetings of Faculty Councils, Student Unions, and other appropriate committees. Nevertheless, competent people were assigned by these institutions to gather opinions and consolidate them into reports. Many other organizations called special meetings to consider the questions raised, and many extended invitations to me to appear before committees to clarify issues. To all these I extend my sincere thanks for their ready co-operation.

I acknowledge with thanks the co-operation of the principals, staffs and students of the 14 Senior High Schools who assisted in the distribution of the student questionnaires, with a special thank you to the group of Student Union Presidents from six Calgary High Schools who gave me excellent advice in the preparation of the student questionnaire.

Finally, I should like to acknowledge the help and co-operation given by the staff of the regional offices in Calgary, and Lethbridge, who from time to time assisted me in the duplication of materials.

R. Warren

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C H A P T E R I

INTRODUCTION

The High School Diploma, or levels of achievement toward the diploma, have been requirements for entrance into continuing education or employment. Perhaps the foundation upon which the diploma was originally built has substantially changed, thus warranting serious review and assessment. The needs of society, and of groups and individuals in particular, are varied and complex. Curriculum content and organization have also become diverse. Amid all this diversity we must ask whether the diploma as presently defined adequately meets legitimate expectation of individuals and society. Therefore a study of current requirements of the diploma, the operational status of those requirements, and alternative forms of documented achievement should be made. It is to these ends that this study is directed.

TERMS OF REFERENCE

(Subject to modification, mutually agreed upon by the researcher and officials of the Department of Education)

The study will include:

- A. A brief review of the history of the High School Diploma as issued by the Alberta Department of Education. This will include a description of the evolving criteria upon which the diploma has been issued.
- B. The present and future status of the credit system and components of the High School Diploma as perceived by such individuals and/or institutions as:
 1. Post Secondary Institutions
 - i. Universities
 - ii. Colleges
 - iii. Institutes of Technology
 2. Employment Community
 - i. Management
 - ii. Labor
 - iii. Government
 3. Alberta School Trustee's Association
 4. Alberta Teachers' Association

5. Selected Schools
 - i. Winston Churchill, Lethbridge
 - ii. Bishop Carroll, Calgary
 - iii. Others which are studying adaptations
- C. Recommendations for consideration of the Department of Education related to the continuance of the high school diploma or alternative forms. This will include -
 1. Basic requirements; programs, courses, modules, if any.
 2. Maximum requirements; credits, number of courses, level of achievement.
 3. Relationship of out-of-school to in-school experiences involving such items as:
 - i. work study
 - ii. work experience
 - iii. private study
 - iv. independent research
 - v. travel, or culturally-related experiences.

LIMITATIONS TO TERMS OF REFERENCE

In other discussions with the committee of Department of Education officials, the author sought further assurances as to the limitations of the study and as a result there was agreement on the following points of clarification which were incorporated later as part of a study guide, in order that participants in the study would be fully informed as to purposes. (Appendix A)

The study does not purport to:

- (a) investigate admission requirements of post-secondary institutions.
- (b) evaluate the content of particular courses, although the awareness of content can be helpful in establishing priorities among subjects.
- (c) examine in detail evaluation methods used either by the Department of Education or the local school systems.
- (d) cast out the Carnegie Unit as a measuring instrument although the usefulness of the unit and some of its derivatives will be examined in relation to the purposes served by the high school program.
- (e) examine the credentials issued for the completion of elementary or junior high school programs.

ADDITIONS TO TERMS OF REFERENCE

- (a) Several other groups were added to those whose advice was to be sought:
 - (i) The Alberta Association for Continuing Education
 - (ii) Alberta Association of Registered Nurses
 - (iii) Alberta Federation of Home & School Associations
 - (iv) Alberta Association of Independent Schools & Colleges
 - (v) High School Principals
 - (vi) High School Students
 - (vii) Student Associations of Colleges & Universities
 - (viii) Associations providing youth programs of an educational nature relating to the aims of the high school or similar to subjects offered in school. (45 Associations)

PROCEDURES

Although the contract for this project was not completed until March 15th, the author began preliminary studies and the gathering of information March 4th. It was felt that the participants in this review or survey were entering into a particularly busy season and that there would be difficulties involved for respondents to call meetings of their Associations. Under the circumstances, it was felt that each Association should be provided with appropriate study materials, together with a study guide and that the study should pinpoint in detail the specific areas upon which opinions were desired. It was recognized that making the study guide highly specific and detailed, was to run the risk that it would be treated as a questionnaire in which categorical answers were sufficient, without the benefit of rationale. Accordingly it was emphasized that opinions or answers to specific questions should be adequately supported by reasons. Respondents were invited to respond to any or all of the questions raised. It was further emphasized that the author would attend any meetings to which he received an invitation.

The materials sent out to each Association consisted of the following:

- (a) the study guide
- (b) five recent articles relating to the curriculum and the influence of the Carnegie Unit on curriculum and school organization.

(c) The High School Handbook

The procedure used to obtain the opinions of the high school student was quite different. A committee of the Presidents of six Calgary High Schools, two from the Separate School System and four from the Public School System acted as advisors in the preparation of a questionnaire to be sent to fourteen high schools in the expectation of getting opinions from 100 to 200 senior students from each school. The response to this activity was extremely good and well worth the large amount of time required to collate the results.

ABSTRACT

CHAPTER VI IS IN THE NATURE OF AN ABSTRACT. IT WILL PROVIDE THE BUSY PERSON WITH A SUMMARY, TOGETHER WITH CONCLUSIONS AND RECOMMENDATIONS.

C H A P T E R I I

REVIEW OF THE REQUIREMENTS FOR HIGH SCHOOL GRADUATION IN THE CANADIAN PROVINCES

There is an excellent publication of recent date entitled, "Requirements for Secondary School Leaving Certificates, and for Admission to University and Teacher Training", which outlines the high school graduation requirements for each of the ten Provinces. It would be redundant to transcribe the material in this paper. The readers who need detail for their understanding and documentation for the changes that have taken place in these requirements recently, should obtain a copy of this survey.¹

The information for my particular study was obtained by direct correspondence with the various departments of education. Some slight discrepancies between my summaries and the aforementioned summaries may arise since the fulfilment of my purposes requires both selection of information pertinent to my study, some interpretation of that information, and where comparisons are involved, conversions from one unit to another.

Some comparisons will be made between Provinces or groups of Provinces, without however attaching value judgements to them. The purpose in making them is merely to placard areas of differences and similarities. These differences and similarities are brought out in the following areas:

The amount of time required to earn a credit.

The number of subjects or credits required for graduation.

The number and kinds of subjects which form the compulsory core of the various programs, irrespective of the interests and career plans of the students involved.

Evaluation procedures.

The extent to which curriculum making is decentralized.

The extent to which high school credits may be assigned for well organized youth activities of an educational nature, neither sponsored nor supervised by school authorities.

1. PUBLICATION OF THE CANADIAN EDUCATION ASSOCIATION
252 Bloor Street West, Toronto, Ontario. April, 1974.

SOME DEFINITIONS:

Throughout this paper we shall be referring to subjects, credits, the Carnegie Unit of instruction, Units. It may be worthwhile to spend a few moments to consider the meaning we attach to these words.

The term "subject" will occur frequently in this paper. Traditionally, a subject is one segment of experience or knowledge that has been set up in systematic form not only to reveal the relationships between the various parts of the system, but also the inter-relationships with other sections of knowledge. In a curriculum sense, the contents of a subject are usually limited to the amount that can be accommodated within the covers of a single book (a text book) and absorbed by an average student in about 120 hours of instruction and study spread over a period of 40 weeks.

As long as schools offered only such time-honored subjects as Chemistry of Mathematics, and assigned approximately 120 hours for their completion, the term "subject" was well understood both as an indicator of content and a rough measure of effort and time spent by the student in its study. In the course of time however, subjects of lesser importance or perhaps lesser comprehensiveness were accepted into the high school program, and were assigned considerably less time and involvement of the student. Physical Education, and Psychology are examples of subjects which were scheduled for much less time than 120 hours. In one school a pass mark in a subject such as Psychology might represent an expenditure of 60 or 70 hours of school time rather than 120 hours, while in another it might represent knowledge gained through intensive study carried on 45 minutes each day for 40 weeks. Under such circumstances, the word "subject" could no longer be even a rough measure of the time and effort required of the student to achieve a pass.

Admissions officers of colleges and universities had no ready way of evaluating a student record or diploma without checking with the school he attended to find out how much time and effort were represented by the record that he had passed in a "subject". This was particularly confusing in the United States where many colleges accepted high school graduation as the chief admission requirement into their institution.

In order to bring some order and uniformity into a confused system of reporting student achievement, a committee was set up in the U. S. A. in 1909 under a grant from the Carnegie Foundation. As a result of the deliberations of this committee, the "Carnegie Unit" was born. The Carnegie Unit made explicit what had always been implicit; namely that the time spent in the study of a subject is a significant factor in development the intellectual growth of a student, and his understanding of that particular subject. The committee defined a

unit of high school education, as 120 hours of instruction and study in a subject. It was assumed that this instruction and study would be carried on over a period of 36 to 40 weeks. In the course of time, the graduation requirement for most high schools in the U. S. A. was defined in terms of this unit. Usually the requirement was 14 to 18 units. Colleges set their admission requirements in terms of these units.

Most Provinces in Canada have been influenced by the Carnegie Unit, but there is no evidence that any Province adopted the concept in its entirety. All Provinces in Canada except Newfoundland have specified a time component as well as an achievement component, for the completion of a unit of study irrespective of whether that unit is referred to as a unit of study, a credit, or simply as a subject. Even though a time component is not specified in Newfoundland, the fact that a student must pass five subjects at Grade XI level for a pass certificate of six specified Grade XI subjects for matriculation suggests that a subject gets approximately one-sixth of the total teaching time in a day. This would amount to about 150 hours of instruction in a year.

The Carnegie Unit, either in its original form, or any of its modifications has never assumed as much importance in Canada as in the U. S. A. from the standpoint of establishing eligibility for college or university admission requirements. Canadian universities and colleges usually specify standing in certain subjects for admission - subjects presumably related to the programs students will follow at the university or college. The high school certificate, which is issued on completion of a specified number of credits is not considered critical to admission.

1. Time required for a credit

B. C.	A subject is allotted from one-seventh to one-eighth of the teaching day.	110-120 hours
Alberta	A credit is defined as 25 hours instruction time.	25 hours
Saskatchewan	Credit defined as 120 to 160 minutes per week	80-107 hours
Manitoba		110-120 hours
Ontario		110-120 hours
Quebec		90 hours
Maritimes	Minimum 120	120-140 hours

Newfoundland Not specified, but since six subjects appear to be a full year's work, it is safe to assume that a subject requires about 150 hours 150 hours

The range is 90-150 hours. The mode is 110-120 hours

2. Number of Subjects or Units required for Graduation;

B. C. 12-14 subjects in grades XI & XII but we must add grade X requirements to make numbers comparable. 20 subjects

Alberta 100 credits but since a full time subject is assigned five credits, this amounts to 20 subjects. 20 subjects

Saskatchewan 20 subjects

Manitoba 20 subjects

Ontario 27 units at completion of year 4 (Grade XII) based on a three year equivalent. 20 subjects

Quebec Diploma issued at end of grade XI 18 subjects

Maritimes 15 credits in three years, but the time allotment per subject is greater than in other Provinces 15 subjects

Newfoundland Graduation requires the completion of five subjects at the end of grade XI. Based on grade X and XI this would amount to ten subjects in the last two years of school. 10 subjects

The total number of hours of study required for graduation varies from a low of 1,500 to a high of 2,800. The mode is 2,300 hours.

COMMENTS ON 1 AND 2

1. All Departments of Education have stressed in their guidelines to principals that the time allotments are flexible, with a strong suggestion from all, and a prescription from a few that the figures quoted are minimum expectations. In other words adjustments to time allotments should be upward rather than downward.
2. All Provinces except Newfoundland are on some form of the credit system.

3. Promotion by subject rather than by grade is now almost universally followed.
4. Major changes re subject promotion, and implementation of the credit system are very recent for most Provinces. Some will not be fully operational until 1975.
5. The trend is to define the time component of a credit as 110-120 hours.
6. The Alberta system of allotting five credits for 125 hours is simply a different accounting procedure than followed by other Provinces. It has some merit in facilitating the introduction of educational modules, a system which will be discussed later in this paper.
7. In general, the high school diploma with appropriate selection of subjects is a partial requirement for university admission. Ontario and Quebec differ in that Ontario requires an Honor Diploma (which takes an additional year) and Quebec requires a further certificate of achievement from one of its public colleges.

3. The Number and Kinds of Subjects which Form the Compulsory Core of the Various Programs, Irrespective of the Interests or Career Plans of the Students Involved.

(a) Ratio of compulsory courses to elective courses

	RATIO	PERCENTAGE
British Columbia	9/20 (1)	45-50%
Alberta	30-35/100 (2)	33%
Saskatchewan	9/21	43%
Manitoba	10/20	50%
Ontario	6/20 (3)	33%
Quebec	4/18	22%
New Brunswick	8/15	53%
Nova Scotia	3/15	20%
Prince Edward Island	6/15	40%
Newfoundland.....		50% plus

- (1) Adjusted to three year program
- (2) Number signifies credits not subjects
- (3) Adjusted to three year program

In most of the Provinces there is a requirement that a minimum of three to four courses for graduation must be at grade XII level.

Where compulsory subjects are minimal, there is usually a strong exhortation to principals and counsellors to encourage a reasonable representation of basic skills and knowledge.

(b) Nature of the Compulsory Courses:

The common language of communication, English or French as the case may be is compulsory in all Provinces.

Social Studies is a requirement in nine of the ten Provinces.

At least one Mathematics and one Science is considered essential, usually in any one of the three years of the program.

4. Evaluation Procedures

	External Exams Required	External Exams Available	Comments
B.C.	No	Yes, for scholarship candidates	Schools exhorted to set up comprehensive evaluation procedures
ALTA.	No	Yes, for scholarship candidates, appeals from locally assigned grades and for private students.	Extension of the present accreditation system is under study.
SASK.	Yes. In grade XII only where the teacher is not accredited.	Yes. A student may write a supplemental prepared either by his teacher or the Department	Copies of grade XI exams (local) must be kept on file for one year
MAN.	No	No	No rigid prescription
ONT.	No	No	No rigid prescription
QUE.	Yes		
N.B.	No	Yes in selected subjects	Post-secondary institutions recommend highly that students sit for the external exams. Schools of Nursing make this mandatory.

	External Exams Required	External Exams Available	Comments
N.S.	No	Yes, to all grade XII students. Used chiefly as a monitoring device	The responsibility for grading is assigned by law to local jurisdictions
P.E.I.	No	A monitoring system	Strictly a local responsibility

COMMENTS:

It is abundantly clear that the traditional system of using external examinations to evaluate student progress has been abandoned in all but two of the Provinces. A system of accreditation exists in Saskatchewan and Alberta and extensions of the Alberta program are being studied.

In the Maritimes where the testing services of Educational Testing Services have been used for some years and where the S. A. C. U. tests are more familiar through use, external tests have been retained to be administered to students on a voluntary basis in order that the results may be used as a basis of quality control.

Since in all cases, the determination of a passing or a failing grade is left to the individual teacher, it can be said and indeed is often said that the only certainty now conveyed by a high school credit is that the student has fulfilled the time requirement for the achievement of that standing or credit.

5. Decentralization of Curriculum Making

British Columbia

- (a) Two locally developed and provincially approved courses may be included to make up the total credits or courses required for graduation.
- (b) Discretionary power is granted to principals to recognize for credit, courses taken extra-murally in Music and/or Religious Studies. The total under (a) and (b) cannot exceed two credits.

Alberta

- (a) Special Project credits may be earned by students to a maximum of three or five credits per year in each of the three years.
- (b) Music certificates earned extra-murally are recognized for school credits, in lieu of credits available for achievement in Music studies in school. A strict conversion table must be followed.

Saskatchewan

- (a) There is provision for a school staff to initiate the development

of a course. If approved by the Minister, it becomes available to all high schools.

Manitoba

- (a) Students may earn up to three credits for Special Projects.
- (b) No credits for certificate programs conducted by outside organizations.

Ontario

- (a) An individual school may get approval for a specific course.
- (b) Approved Music certificates are granted one school credit in addition to credits earned for Music studied in school.

Quebec

- (a) A local school may get approval for a specific course, but this practice is quite limited.
- (b) It is customary to recognize for school credit certificates in Music by such institutions as Toronto and McGill Conservatories of Music.

New Brunswick

- (a) No provision for locally developed courses. It is stated "the matter will be up for consideration in the near future".
- (b) Music. The same as above.

Nova Scotia

- (a) Approval for locally developed courses is definitely under consideration.
- (b) No reference.

Prince Edward Island

- (a) Approval for locally developed courses under consideration.
- (b) Music under consideration.

Newfoundland

- (a) No reference.
- (b) No reference.

COMMENTS: (Decentralization)

Most Provinces are now allowing or encouraging schools to develop courses more closely related to the special needs of a community or to the special interests of groups of students or in some cases individuals. Some who have not yet joined this trend have it under consideration.

In only four of the Provinces, Ontario, Alberta, British Columbia and Quebec is credit given for courses taken completely under the supervision and control of outside agencies (non-school agencies). Such credits are mandatory in Alberta, Ontario and Quebec, and permissible under the approval of the principal in B. C. Music is recognized in all three under a rigid conversion schedule and it is perhaps significant that Music is also a course that is offered in the regular school program.

In some cases the credits are in lieu of Music credits that are offered in school, in other cases the credits are in addition to credits given for school music courses.

In other words there is not much evidence of a disposition on the part of the provincial educational authorities to recognize for school credits, work that has been accomplished under the control and supervision of outside agencies even if the activities so sponsored are closely related both to the general objectives of the high school program, and to particular courses offered by the school.

Responsibility for Issuing Graduation Diplomas

British Columbia

The Department provides an official graduation Diploma Form. The school officials fill it in and issue it to the students. Transcripts available from the school.

Alberta

A diploma is issued by the Department of Education on the recommendation of the school.

Saskatchewan

No diploma, only student transcripts are available from the Department.

Manitoba

No diploma. Student transcripts are available from the Department.

Ontario

Secondary School Graduation Diploma, and Secondary School Honour Graduation Diploma issued by the Department of Education on recommendation of the principal.

Quebec.

Certificates issued by the Department of Education upon successful completion of external exams.

New Brunswick

Issued by the District School Boards.

Nova Scotia

Department of Education provides a form. Schools may use it if they wish.

Prince Edward Island

Issued by the Department of Education on the recommendation of the school principal.

Newfoundland

Issued by the Department of Education upon the successful completion of external exams at grade XI.

COMMENTS

In the majority of the Provinces the issue of a diploma is still regarded as desirable or necessary by the educational authorities, as a visible symbol of graduation.

From correspondence received, it is obvious that the official student transcript rather than the diploma is considered the most useful and significant document.

C H A P T E R I I I

THE HISTORICAL DEVELOPMENT OF HIGH SCHOOL GRADUATION

REQUIREMENTS IN ALBERTA

Prior to 1937, changes in school programs and school organization took place at a steady but very slow tempo, in keeping with the growth of the Province and with the changing philosophy of education. Insofar as the upper school grades were concerned, the main changes that occurred were: (*)

- 1913 A Provincial Director of Technical Education was appointed. Partly through his influence, the high school program was broadened to include Agriculture, Music, Art, Manual Arts, Household Economics, and a two year commercial program.
- 1924- The change from promotion by grade to promotion by subjects
1925 in the high school was introduced.
- 1936 The junior high school organization plan was given approval by the Department of Education. It was first adopted by the cities, and later by the larger towns.
- 1937 Coincident with the change to junior high schools, Departmental Examinations were introduced in grade IX, and grade IX rather than grade VIII became recognized as the termination grade for compulsory schooling, for students who had not reached the age of 15 years.

At the same time Departmental Examinations were discontinued at grade X and XI, but retained at grade XII.

- 1937- The credit system was phased in during this three year period.
1940

The main features of the credit system as introduced in 1937 were: (*)

1. A school day that comprised eight class periods; one, a study period, so that 35 periods per week were available for instruction.
2. A subject to carry as many credits as the number of periods per week devoted to its instruction. Students could earn 35 credits per year; and students who completed their three year program and earned 100 or more credits "will be granted the High School Diploma, which will be the same for all students, no matter what subjects or courses are taken".

- (*) Alberta Schools, 1902-1938. A documented term paper submitted as a University of Alberta course requirement by Jean Horricks.

3. Lines separating Academic, Technical and Commercial were erased. Only English (which included Literature and Language), Social Studies, Health and Physical Education were compulsory for every student.

Matriculation requirements were to be determined after joint deliberation with representatives of the Faculty Committee concerned.

Prior to the changes brought about in the 1937-40 period, grade IX was generally considered the school leaving point for those students unable or unwilling to attend institutions of higher education. The high school program, almost totally academic in all but the large schools in the city school systems was an efficient screening device to separate the academically weak from the academically strong. The efficiency of this operation was ensured and the uniformity of the product was controlled by the device of external examinations prepared and marked under the direction and supervision of the Department of Education. The efficiency is attested to by the statistics of the day which indicated that 15% of those entering school graduated and that of the 15% a small percentage obtained matriculation standing. To achieve a high school diploma was akin to coming second in a race of from ten to fifteen students of like age; to achieve matriculation standing was akin to coming first.

Unquestionably the screen was a great help in the selection of students of university calibre, and though the screen was set up mainly for this purpose, it was used as a convenience by commerce and industry to aid in their selection of student applicants for jobs.

The changes brought about in 1937-40 were not simply modifications in and rearrangements of subjects. They reflected a genuine change in philosophy. The high school was to change its bias from a preparatory school for post secondary institutions to a school offering genuinely educational experiences to all who entered its doors. The purpose of preparing students for entry into institutions of higher education was retained, but subordinated to what might be called general education for all.

The influx of students into the senior high schools which was a dominant factor in bringing about the changes in 1937-40 continued and in fact accelerated after the 1937-40 changes became operational. It is needless to detail all of the factors leading to the increase in the numbers seeking high school graduation, but certainly the changes made in the high school program, the development of the comprehensive high school with its highly diversified programs must be numbered among the educational factors. In the economic-social field, the chief factors were the lessening of opportunities for the unskilled and ill-informed, and a rapid upward shift in what the public was willing to accept as the base-line of functional literacy.

Whatever the causes of the increased interest in obtaining high school education, modifications had to be made in the organization and programs of the high school during the 35-year period from 1940 to the present. In the 1960's there was a brief flurry of Federal interest in the high school programs of the Provinces. A "national interest" of the time was to meet the critical manpower needs for developing commerce and industry. The Federal-Provincial Technical & Vocational Assistance Act was passed in 1963. Vast sums of money were made available for developing technical and vocational programs in high schools. In order to qualify for Federal grants, the technical and vocational programs had to be quite specific and intensive.

Many of the comprehensive high schools adopted tracking or streaming of students as a more efficient method of dealing with the new conditions. In so doing they deviated substantially from the philosophy implied in the regulations of 1937-40. This is an evidence of the indirect way by which substantial inputs of Federal money can and does in fact impose controls on Provincial programs which by the constitution are the sole responsibility of the Provinces. Tracking and streaming procedures flourished only a few years and declined due to withdrawal of Federal support for the new programs and because of public dissatisfaction with the streaming programs. This dissatisfaction arose partly because of the difficulty in finding a suitable and publicly acceptable means of sorting students into different tracks, and because of the failure of the high schools to provide sufficiently flexible ways for students to change programs or parts of programs. It might be stated parenthetically that Rosenthal's theory of the self-fulfilling prophecy was influencing the thinking of both professionals and laymen.

A number of other accommodations were introduced into the high school programs and organizations in the period between 1940 and the present, the most significant of which were:

- (a) Normal distribution curves were used as the basis of evaluating the examination papers in grades IX and XII. Students were rated against the total population of their grade instead of against some absolute standard.
- (b) Non-Matriculation students were excused from the necessity of writing any external exams. It became possible to graduate, with only one grade XII subject (English) contributing to the 100 credits required.
- (c) Departmental approval was more readily given to locally developed courses and to student projects as a means of achieving the high school graduation requirements.
- (d) Finally the grade XII external examinations were abandoned.

In all fairness it must be stated that many of these changes were based upon firmer logic that the need to graduate more students, but the general effect was to bring a much greater percentage of students to graduation.

Two questions arise from the foregoing sequence of changes:

1. Has the high school diploma become a meaningless document signifying only that the student has put in the required time required by the definition of a "credit"?
2. Has the elimination of the external examinations done a disservice to the students and public alike. To the public by the lowering of standards, to the students in giving them false assessments of their potential, and to the universities in reducing the reliability and validity of their "screen"?

These questions together with the questions posed in the terms of reference will be paramount as we examine the briefs, and more particularly as recommendations are considered.

C H A P T E R I V

SUMMARY OF BRIEFS FROM ORGANIZATIONS NOT DIRECTLY INVOLVED

IN HIGH SCHOOL EDUCATION

ALBERTA SENIOR HIGH SCHOOL GRADUATION REQUIREMENTS

UNIVERSITIES OF ALBERTA, CALGARY, AND LETHBRIDGE

The universities do not in fact have the same confidence in the high school diploma as a useful tool or criterion for determining the suitability of candidates for their programs, as they had when course content and standards were more uniform and rigorous. Their present interest in student credentials lies mostly in the standings achieved in the five or six matriculation subjects, because they are senior level courses and because of their more specific application to the university programs. Content and standings prior to the senior year in high school are not regarded as being particularly significant.

Nevertheless they concede that the high school diploma is acceptable as evidence of breadth of educational background and of student maturity. In other words, the high school diploma is regarded as of marginal importance as an admission requirement.

Although university officials were not asked specifically to react to the recent abolition of external examinations for grade XII, one response expressed the pessimistic view the "Transcripts listing the same course title and credit assignment, no longer provide any assurance that courses of like titles are identical between schools, or the same within that school from year to year. As for the grades which accompany the transcript, data are available which establish the scale slippage from departmental determination of grade to teacher determined marks".

The source of the aforementioned data is not given in the brief, but certainly the scale slippage reported is in keeping with the conclusions of a thesis on the subject recently completed in Alberta. (*)

- (*) Terrence Anthony Rusnack: Effects of Accreditation on Grade XII Matriculation Marks in Alberta. (M.A. thesis, University of Calgary, December, 1973).

COMMENTS ON THE UNIVERSITY OF ALBERTA BRIEFS

It is obvious that the universities have reason to believe that one of their most useful selection tools has been seriously

blunted by the substitution of locally determined marks for external examinations. The loss to the universities must be carefully weighed against whatever educational gains are expected to accrue to students as a result of the change. This matter will be discussed further under Evaluation in Chapter VI.

THE AGRICULTURAL COLLEGES

The Agricultural Colleges use the high school diploma as an evidence of a degree of persistence or discipline on the part of a student, to complete a task, and as an indication of student maturity. They do not regard it as an essential ingredient in their admission requirements. In fact it is usual for them to accept the high school certificate or 18 years of age as equivalents.

COMMENTS ON THE BRIEF OF THE AGRICULTURAL COLLEGES

There is no opposition to the proposition that every high school student should be able to obtain a high school certificate, but there is an insistence that a certificate based upon this philosophy has limited use for admission purposes.

ALBERTA ASSOCIATION OF REGISTERED NURSES

1. The current 100 credits is considered a good base-line.
2. A credit granted on the basis of 40% achievement is considered too low.
3. The validity of the High School Diploma as an admission standard, in that marks used to grant the diploma are not based upon uniform standards, is questioned.
4. The lack of uniformity in course content and examinations make comparability of knowledge difficult.
5. The teaching of English (reading, writing, speaking) is very poor.
6. The teaching of Mathematics is questionable in that nursing students are unable to make essential calculations without additional assistance.
7. Science (biology and chemistry) courses are considered essential for nursing. There is, however recognition that students do not have uniform content in the various school situations.
8. Schools of Nursing are increasingly admitting students under the adult privilege class. This means consideration should be given to developing grade XII challenge examinations.

COMMENTS

Basically the comments made re the requirements for a diploma, and the abolition of the external examinations in the case of universities are applicable here. The question is raised implicitly,

"To what extent should the program of studies particularly in the junior grades of the high school be specifically designed as preparation courses for institutes of post secondary level?"

NORTHERN AND SOUTHERN ALBERTA INSTITUTES OF TECHNOLOGY

1. A basic core of three years of English together with two years of Science and Mathematics should be compulsory for all students.
2. Work experience is considered a very valuable part of the education of a high school student.
3. Student credits for Special Projects and for performance in certain non-school activities are supported.
4. They value composition as well as Literature.
5. Consumer Education should receive more attention.
6. Credit should be allowed for achievement irrespective of instruction time involved.
7. Emphasize the preparatory function of the high school program for entry into career programs at post secondary institutions.
8. The high school diploma should represent a more uniform pattern of studies.

COMMENT

The position of the Institutes re the preparatory function of the high schools is similar to that expressed on behalf of the Nursing Association.

ALBERTA FEDERATION OF LABOR

1. The high school diploma should be within the reach of practically all students who have completed the junior high school grades, as well as the great majority of adults who have the courage to undertake special studies to meet the requirements for graduation.
2. The high school diploma is a useful indicator of general growth and development, but it should seldom or never be used as a barrier to job entry, since specific knowledge and skill requirements can

best be assessed from the official transcripts, while personal qualities and attributes specific to the job may best be assessed by other techniques and indicators.

3. Every effort should be made to permit adults to close gaps in their education. Their "living" experiences together with their present attitudes and motivations should receive high consideration in permitting them to raise their educational levels and job entry skills.

COMMENTS

It is obvious from the foregoing that the Alberta Federation of Labor officials feel that the high school graduation program should not be in the nature of an obstacle course with sequentially higher academic barriers to separate the bright from the less bright, a process ending with a few winners and a casualty strewn field. They conceive of the high school program as a broad field of developmental opportunities with many paths leading to the exit, with challenge for all but with differing degrees of difficulty for the various paths to the exit.

With respect to adult education it will be equally obvious that their concerns and recommendations are in harmony with those presented in the last chapter of this survey by the officials responsible for the administration of the Alberta Continuing Education Program.

THE ALBERTA CHAMBER OF COMMERCE

1. Requirements for the Alberta High School Diploma are fairly reasonable. A broadly educated individual is necessary.
2. Anyone who sits through the right number of courses, regardless of the results should get some piece of paper acknowledging the fact,

but

the level of his or her performance should be clearly stated.

3. Work Study and Work Experience are valuable to a student, but there must be more uniform procedures and better monitoring.
4. Private study or out-of-school activities should probably not be recognized for high school credits.
5. Those courses should be compulsory that ensure the student satisfactory ability to communicate in spoken and written word; which give him identity in current society through perspective of past society; and a moral value that can be incorporated in

course subjects, that will enable him to fit into society in a manner that will give him satisfaction with himself and satisfaction with those with whom he must interface.

6. There must be frequent monitoring of quality.
7. English, Mathematics and Communication skills are necessary.
8. Diplomas should indicate emphasis and achievement within the broad framework. In the interests of uniformity one diploma would suffice.

COMMENTS on the Alberta Chamber of Commerce Submission

The business community as represented by the Alberta Chamber of Commerce seems in general agreement with the broad goals of education as formulated by the Alberta Department of Education. Understandably since they represent a large group of employers they are concerned that basic skills in communication and in Mathematics reach higher performance levels. Students often reveal their inadequacies in English in the filling out of job application forms.

ALBERTA FEDERATION OF HOME & SCHOOL ASSOCIATIONS

Officers of the Federation found it difficult to arrive at a corporate point of view, but individual members presented their views which were forwarded without evaluation by the Association.

The summary is my own from letters received.

1. General agreement with the required courses as now listed.
2. A course in Family Living is considered essential.
3. Mathematics and Science should be given more emphasis in the required area.
4. The pass mark for a credit should be raised to 50% from the present "D" standing or 40%.
5. Provision should be made for completion of courses in less time than that specified in the time component of a credit.
6. Credits for school related but non-school supervised or sponsored subjects should be limited to Music and Ballet, since these are accredited by National or Provincial exams.
7. Question raised as to whether or not Physical Education should be compulsory.

COMMENT

One senses a difference between the Federation of Labor and the Federation of Home & Schools in the philosophy underlying the High School Diploma. The desire for more compulsory subjects, an increase in Mathematics and Science requirements, and a raising of the pass-mark from 40% to 50% are all indicators of the desire to upgrade the screening function of the Diploma.

The more specific proposals will be considered in more detail in the final chapter where recommendations under specific topics will be considered and presented.

STUDENTS ASSOCIATION OF THE RED DEER COLLEGE

1. The philosophy governing the granting of credits should parallel the policy of allowing students to advance at a rate commensurate with ability; i.e. if a more gifted student is capable of completing course work in half the expected time, he ought to be granted full credit. The same situation should apply to lesser achievers as well.
2. We acknowledge that the high school diploma is not always the best indicator of ability - a number of our students do not possess a diploma, but are succeeding well. The diploma however, is useful as an indicator of the background a student has, as well as a fair standardization of an education's quality. Since high school is still the most prevalent route to a post-secondary education, we recommend that diplomas continue to be issued as a statement of academic achievement.
3. It is suggested that less emphasis be placed on attaining 100 credits. Instead, a stronger emphasis should be placed on helping a student explore, and reach the fullest limits of his or her ability.

COMMENTS

There is evidently support for the idea that the high school graduation program is not primarily a screening device.

STUDENTS UNION, UNIVERSITY OF ALBERTA

1. The Board felt that the current philosophy behind the requirements for a high school diploma were commendable; i.e. of requiring high school students to complete a variety of courses that prepare them for active participation in society in a general way.
2. Language skills, knowledge of the physical sciences, the social sciences and the humanities should be core requirements.

3. The high school diploma in itself is insufficient as an admission requirement for university. More specific skills and knowledge are required for this purpose due to demands faced by students during their academic career. This does not deny the role of the diploma as a partial requirement.

COMMENT

The similarity between the comments of the high school graduates now in college or university is noteworthy.

CREDIT RECOGNITION FOR ACHIEVEMENT IN ORGANIZED ACTIVITIES,
NEITHER SPONSORED NOR SUPERVISED BY THE SCHOOL.

In order to get a wide spread response on this matter, lists of organizations serving youth in many ways were obtained from the Alberta Department of Culture, Youth and Recreation. Invitations to comment on this question were sent out to all organizations on the list who were checked off by the Department, as carrying on school-related activities for school-age youngsters. Forty-five invitations were sent out. The responses of the six who replied are summarized below:

Water Safety Services
Canadian Red Cross Society

No feeling expressed that credits should be granted.

Alberta Squash Racquets Ass'n

Credits should not be granted especially if the activity is not controlled by the school.

Canadian Figure Skating Ass'n
Alberta Section

In spite of the fact that there are National standards, strict rules for evaluating performance, and a panel of competent judges, it is felt that this activity should be recognized only under the Special Projects provisions of the present regulations of the Department of Education.

Canadian Amateur Swimming Ass'n
Alberta Section

It is suggested that swimming, figure skating, nationally set compulsory gymnastics and badminton could be set up in a manner that should qualify them for high school credits.

Canadian Amateur Synchronized
Swimming Ass'n
Alberta Section

A certification program is being evolved Nationally. When completed, which will take several years, school credits for certified performance would be welcomed.

Judo Alberta

It is stated that Judo might possibly be recognized for credit since standards are set by Provincial and National bodies.

Since only six replies were received out of 45 invitations, one must assume that there is not a great deal of interest on the part of members and officers of these associations to have their activities recognized for High School credit.

From the replies received two facts became obvious:

If the credits are to be granted for non-school activities, there should be strict National standards to be achieved, and strict rules for the evaluation of that achievement.

If we assume that credits should be granted, there still remains the problem of whether they should be granted under the present provision for Special Projects, or whether they should be given the same recognition now afforded to Music. In the latter case, teacher supervision is not involved. The credits are given automatically when the Toronto Conservatory or other accredited body grants a particular certificate of grade standing.

This matter will be discussed again, under evaluation and recommendations.

C H A P T E R V

SUMMARY OF BRIEFS FROM ORGANIZATIONS DIRECTLY INVOLVED

IN HIGH SCHOOL EDUCATION

THE ALBERTA SCHOOL TRUSTEES ASSOCIATION

The brief of the A. S. T. A. contains a strongly worded plea for the establishment of a results-based crediting system, which would apply not only to students but also to adults seeking some form of education credential for job entry or upgrading. This is in fact an elaboration or extension of the A. S. T. A. policies two of which read as follows:

- 4.00 The A. S. T. A. believes that the basic objectives of educational organizations is to produce growth in knowledge and skills including knowledge in the humanities and skills in assessing and formulating attitudes.
- 4.10 The Association shall urge that teaching and measuring instruments and procedures be used to periodically assess growth in knowledge and skills.

The results-based concept presented in the brief goes far beyond that of a simple monitoring system, to include diagnostic and remedial services as companion services to performance testing. The concept is presented as an ideal that would require substantial if not enormous inputs of personnel and finance. It is suggested however, that a modest start could be made toward the ideal of developing pilot projects in some of the existing innovative schools.

Many of the suggestions made by the A. S. T. A. re high school graduation requirements are dependent upon the implementation of results-based crediting.

SUMMARY OF THE BRIEF

- 1. Structure of the graduation program.
 - (a) The present ratio of compulsory to optional courses is satisfactory.
 - (b) The weighing given to academic areas should be reviewed continuously in light of conditions.
 - (c) The high school diploma will be more meaningful in a results-based crediting system.
 - (d) Diplomas should specify programs completed.

2. Work Study, Work Experience and Special Projects.
 - (a) These are all valuable when related to sound educational goals. If goals are acceptable, credits can be offered in a results-based system.
3. High school credits for non-school activities.
 - (a) Acceptable if related to a results-based system.
4. The Alberta system of awarding credits.
 - (a) The time requirement for a high school credit is of little importance in any case, and becomes insignificant in a results-based system.
 - (b) Uniform definition of credits is favored for all Provinces.
5. Continuing Education.
 - (a) The present provisions for recognizing diverse experiences should be expanded:

"If a specified set of knowledges and skills is required in order to obtain a high school diploma, and if a certain portion of those knowledges and skills is also required to obtain a welder's certificate there seems to be no reason why the knowledges and skills could not contribute to certification in both areas."

THE ALBERTA TEACHERS ASSOCIATION

The A. T. A. brief relates the answers to most of the questions posed in the Study Guide to policy statements of the Alberta Teachers Association and suggests that the scope of the present survey is too narrow to be of much service in improving education at the secondary level. Their answers reveal a sense of futility in dealing with what are considered to be minor issues. Their position is summarized as follows:

1. Structure of the graduation program.
 - (a) There is need for a broad humanities curriculum with both compulsory and optional areas and more movement towards general education.
 - (b) Academic areas need constant re-assessment in the light of their contribution to the goals of basic education.
 - (c) Placement and selection criteria of other agencies are not the main concern of evaluation at secondary level.

- (d) There is no need for a variety of graduation diplomas.
- 2. Work Study, Work Experience and Special Projects.
 - (a) Work Study should be dropped as a label, but activities bringing students into contact with the working world should be continued within the context of various courses.
 - (b) Work Experience is acceptable if it does not result in teacher delegation of professional tasks.
 - (c) Awarding credits is a school function and should involve only activities which the school through its professional staff has prescribed, overseen, assisted in and evaluated.
- 3. High school credits for non-school activities.
 - (a) These activities are not the function of the school and should not receive school credit.
- 4. The Alberta system of awarding credits.
 - (a) To get the experiences commonly involved in high school education, a student may need to be in high school for X years, but this broad time component is certainly different in scope and effect than the delimitation of education to the intense degree specified in subject matter parcels of 2, 3, and 5 credits.
 - (b) Certainly the timetabling orientation of the credit system does hinder some activities such as long field trips.
 - (c) Until the question of goals is settled we doubt very much that there will be any success in attaining a Canada-wide definition of credits.
- 5. Continuing Education.
 - (a) Why should a diploma assume such importance to an adult?
 - (b) If a person has not been in school to complete the experience required for the achievement, why award the diploma?

CALGARY HIGH SCHOOL PRINCIPALS

- 1. Structure of the Graduation Program.
 - (a) The present structure into compulsory and optional areas is satisfactory.
 - (b) The designation of more specific courses is not favored. Canadian History and Contemporary Problems can be adequately

presented as units within a Social Studies program.

- (c) There should be one diploma for all graduates, but six out of 11 principals specify that this diploma be a record of courses successfully completed.
- 2. Work Study, Work Experience and Special Projects.
 - (a) Work Study is useful and offers no problems.
 - (b) Work Experience and Special Projects are important parts of a secondary school program but there must be better definition of areas and better control.
- 3. High school credits for non-school activities.
 - (a) The assignment of credits to educational activities not controlled by the school is not favored.
- 4. The Alberta system of awarding credits.
 - (a) Time is not considered of much importance as a requirement in the awarding of credits.
 - (b) An average time rather than a minimum time would be useful.
 - (c) Six of 11 high school principals regard the present credit system as restrictive to good educational organization. They feel that a modular system would be preferable.
 - (d) Uniformity in the definition of a credit throughout Canada is not important.
- 5. Continuing Education.
 - (a) Trade experience and qualifications should be given greater recognition for adults seeking a high school diploma or a high school equivalency diploma.

CENTRAL ALBERTA CONFERENCE OF HIGH SCHOOL PRINCIPALS

- 1. Structure of the graduation program.
 - (a) The present designation of compulsory and optional areas is generally satisfactory.
 - (b) There should be more specificity in the academic compulsory courses.
 - (c) Physical Education should place greater emphasis on individual sports.
 - (d) All graduates should receive the same diploma but subjects and achievement should be recorded.

2. Work Study, Work Experience and Special Projects.
 - (a) There should be no expansion of these activities beyond the present limits.
 - (b) Better definitions and controls are imperative.
3. High school credits for non-school activities.
 - (a) Members were unanimous in proposing that no credits and no recognition be given to out-of-school activities under control and supervision of non-school personnel.
4. The Alberta system of awarding credits.
 - (a) The time-credit link should be maintained but more flexibility should be permitted.
 - (b) The present credit system is not restrictive to good educational organization.
5. Continuing Education.
 - (a) There should be a clear distinction between a high school certificate and an adult equivalency certificate.
 - (b) Credits for age cannot be supported.
 - (c) The program for the adult equivalency certificate should parallel closely the requirements for the high school certificate.
 - (d) The adult equivalency certificate should be issued by the Department of Education rather than by the local continuing education authorities.

CALGARY SEPARATE HIGH SCHOOL PRINCIPALS

1. Structure of the graduation program.
 - (a) Compulsory areas should be generally increased, although specific requirements for English might well be decreased.
 - (b) Minimal academic content could be better specified.
 - (c) There should be more room for student options in interest areas.
 - (d) All graduates should receive the same diploma but the level of performance in subjects should be recorded.

2. Work Study, Work Experience and Special Projects.
 - (a) Present provisions are adequate.
3. High school credits for non-school activities.
 - (a) Non-school activities should be related to a given school subject and counted as partial requirement for a school credit. In other words they must be extensions of the regular school program.
4. The Alberta system of awarding credits.
 - (a) The time required for a credit should be retained as an average expectation, but level of performance should be the critical component of a credit.
 - (b) The present credit system slightly hinders good educational organization.
 - (c) There is a division between principals who desire a change to a modular approach to organization and those who favor change to an organization geared to semester hours.
5. Continuing Education.
 - (a) No consensus on problems associated with continuing education.

EDMONTON PUBLIC HIGH SCHOOL PRINCIPALS

1. Structure of the graduation program.
 - (a) Restructure the graduation requirements to more adequately reflect societal needs in service, vocational, communications, environmental and consumer fields.
 - (b) Graduation requirements should be modified so that a greater proportion of the population find graduation geared to their interest and within their grasp.
 - (c) The diploma as it presently exists has outlived its usefulness with regard to meaning, clarity, and relevance to some publics. In certain respects it makes a mockery of (i) standards of quality, (ii) usefulness as a selector and predictor, (iii) the guarantee that the holder possesses minimum knowledge and is able to acquire more.
 - (d) The routes followed for the achievement of the certificate should be clearly delineated on the certificate.

2. Work Study, Work Experience and Special Projects.
 - (a) Provision should be made for evaluation of the students' vocational ability in actual work situations.
 - (b) Special Projects must be under teacher sponsorship and control.
3. High school credits for non-school activities.
 - (a) The practice should not be extended; infact the validity of the present policy is questioned.
4. The Alberta system of awarding credits.
 - (a) It is suggested that the Department of Education permit the division of courses into 1, 2, or 3 credit modules.
5. Continuing Education.
 - (a) No comments.

S. W. ALBERTA PRINCIPALS ASSOCIATION

1. Structure of the graduation program.
 - (a) The compulsory portion of graduation requirements should be reduced. Minor adjustments are needed in Social Studies and Physical Education requirements.
 - (b) There should be greater specificity of course content and provision for more emphasis on Canadian History.
 - (c) There should be one diploma. The transcript will best serve for selection and prediction purposes.
2. Work Study, Work Experience and Special Projects.
 - (a) Work Experience is very valuable and could be extended to permit an optional semester of practical work. This could be left to arrangements within the community.
 - (b) Special Projects should be continued.
3. High school credits for non-school activities.
 - (a) No comment.
4. The Alberta system of awarding credits.
 - (a) Instruction time vis a vis study time could be negotiated

between the student and teacher under the present credit system.

5. Continuing Education.

- (a) The present arrangements for upgrading adult qualifications seem to be satisfactory.

WINSTON CHURCHILL HIGH SCHOOL (LETHBRIDGE) and,
BISHOP CARROLL HIGH SCHOOL (CALGARY)

The programs of these two schools are organized to provide for individuality of student programs and for promotion of self-directed study. The organizations provide for; flexibility in time allotments for various studies, student progress along broken fronts, and periodic adjustment and change in student programs. A critical ingredient in both systems is the emphasis on performance objectives.

In order to achieve the objectives, these schools will require a great deal of flexibility in the time requirement for a credit. The statement of an average time requirement would be useful to them as a point of departure for students who require a greater or lesser amount of time to achieve performance objectives.

A second requirement for the fulfilment of their objectives, is that subjects be broken into modules of one credit. At present they attempt to work within a modified modular system, but their operations are hampered by the inability to assign credits upon completion of modules.

INDEPENDENT SCHOOLS

1. In general, the Department of Education must not impose a structural system that will hinder a school in reaching those objectives for which it remains independent, given that such a school is educating to a minimum level required by the Department. 100 credits is reasonable.
 - (a) Must be permitted to develop some of their own courses beyond this minimal requirement.
 - (b) Suggests variable credits; e.g. if a school wishes they could give 3 credits for Mathematics 10, and 7 for English.
 - (c) Requirements for local Diploma could be higher than that for the Department.
 - (d) Should be permitted to waive pre-requisites.
 - (e) No extension to non-school activities.

- (f) Special projects favored.
- (g) Diploma state area of specialization.

SPLINTER GROUP OF INDEPENDENT SCHOOLS (no conflict with above)

The group subscribe to all of the above suggestions, but feel that there must be some quality control, so that some minimal achievement is represented by the diploma.

This would establish the primacy of achievement rather than of time. Let the school decide upon the time they wish to assign to any subject. In other words, if achievement became the necessary component, time might be considered the organizational variable left to the school.

CONFERENCE OF ALBERTA SCHOOL SUPERINTENDENTS

1. Structure of the graduation program.
 - (a) A fair balance between compulsory and optional courses has been maintained, and there is provision for local boards to design special courses to meet the needs of the community.
 - (b) Physical Education courses should be organized on a continuing basis rather than a one-shot basis. Provision should be made for a student to withdraw from any Physical Education course.
 - (c) All high school students should be given the opportunity to take at least one course in Canadian History.
 - (d) The high school diploma should never be used as a selection and predicting agency. Transcripts should always be available where more specific information is desired about a student.
2. Work Study, Work Experience and Special Projects.
 - (a) These programs are valuable but there should be a more adequate system of measuring the results and for monitoring the programs.
3. High school credits for non-school activities.
 - (a) The high school diploma should represent only the students' accomplishments in those areas of study taken under the direct sponsorship of the school.

4. The Alberta system of awarding credits.

- (a) It is recommended that consideration be given to the abandonment of the strict definition of a credit and that more freedom be permitted, with controls to ensure a quality of excellence to be achieved in each subject studied, rather than a period of time to be followed.

5. Continuing Education.

- (a) No comment.

THE ALBERTA ASSOCIATION OF CONSULTANTS IN EDUCATION

1. Replace the present high school diploma with a high school leaving certificate which specifies each individual student's accomplishments.
2. Abolish the 100 credit requirement, and leave the number of completed units open.
3. Change course values from credits to units, and base all such values on "full" courses and "half" courses.
4. Allow students freedom in planning in-depth or in-breadth programs.
5. Bring all high school "courses" under the jurisdiction of the school, but continue to recognize local autonomy where possible.
6. Modify the Carnegie Unit by allowing more flexibility within upper and lower limits of time.

STUDENT REACTIONS

Information for this section was compiled from questionnaires submitted to 1,453 students from grades XI and XII. The reader is referred to Appendix "D" for statistical details. There were nearly 500 student responses of a general nature that could not be readily categorized. These have not been included in the Appendices, but inferences have been drawn from the replies, and are reported in this section.

Compulsory areas of the graduation program.

When asked to list subject areas considered to be most important for high school students, the following rankings were given:

Communications -	named by 1,345 students
Science -	named by 1,336 students
Mathematics -	named by 1,331 students
Social Studies -	named by 1,286 students
Physical Education -	named by 909 students

Optional areas.

When asked to name eight subjects from a group of 25, they were quite consistent in naming subjects from the areas already selected as the most important.

Very high ratings were obtained for Family Life and Sex Education, Consumer Education, Basic Economics, Contemporary Problems and Canadian History.

This information should be useful for curriculum makers. Its value would be enhanced if this survey could be replicated periodically.

Analysis of General Comments of Students

Despite general acceptance by the students of the structure of the graduation requirements, the following suggestions and recommendations were brought forward. The relative strength of the feeling about each may be roughly measured by the number of students who mentioned the same concerns. Comments have been categorized provided there were more than five comments on the same topic.

- 66 - students complained that too much time was devoted to compulsory subjects.
- 59 - students felt that there was too much emphasis on the attainment of 100 credits. They felt that if a student had say 97 credits with high standings, this should be regarded as equivalent to 100 credits of lesser standing.
- 43 - students objected strongly to what they termed excessive requirements in English.
- 27 - students objected to the fact that Physical Education is compulsory.
- 17 - students objected to a compulsory course in Mathematics.
- 15 - students objected to the minimum time requirement for a credit.
- 11 - students objected to excessive requirements in Social Studies.
- 26 - students suggested that instead of the so-called excessive requirements for English and Mathematics, there should be more opportunities to study in the areas broadly defined as "the humanities".

Unsolicited Submissions from Parents

Three submissions were received from parents objecting to the difficulties they had encountered in withdrawing their children from the compulsory Physical Education course.

C H A P T E R V I

RECOMMENDATIONS

In the previous chapters, the positions taken and the arguments presented by the respondents have been kept quite separate and distinct from the comments of the author of this report. Recommendations however require a process of distillation, evaluation and melding. As a result individual contributions lose their identity and the author must take final responsibility for the recommendations. It might be fair to assume however, that the rationale preceding each recommendation reflects the combined wisdom of the group.

The organization of this chapter will follow the format of Section "B" of the Study Guide (Appendix A).

GENERAL REQUIREMENTS FOR THE HIGH SCHOOL DIPLOMA

1. Purpose

A comment frequently raised by groups of educators was that this study, with its emphasis upon structure and organization rather than content and process, was superficial and that any remedies proposed in keeping with the terms of reference must be regarded as band-aids. It was pointed out to them that this study could make only passing reference to these problems, in the sense that improved structure and organization might provide the means for their direct intervention in the areas of their concern.

A question frequently asked was, "Who is the High School Diploma for - the student, the parent, the employer, the admission officers of post-secondary institutions?" This question was usually followed by a statement, "Tell us who it is for and we can tell you better what the requirements should be to achieve it." The question is relevant and requires some discussion.

The purposes of the high school diploma as perceived by the author were set out in the Study Guide (Appendix A, pages 2 & 3). It was stated that "The high school certificate, from a social point of view is, or ought to be, an indication that the student has achieved what the State or Province conceives to be an absolute minimum of preparation for responsible citizenship." While some objected to this statement on the grounds that responsible citizenship could not be defined, there was no widespread objection to the statement.

The nature and purpose of the high school program as defined by Provincial Government officials has changed little from the statement made in 1935, when a major change occurred in the Provincial program and the following guidelines accompanied the introduction of the credit system:

(Annual Report, Alberta Department of Education 1935, Page 19.)

- (a) the revised course must take greater account of the needs of the many students who could never go on to higher education.
- (b) certain now relatively neglected experiences must be provided for.
- (c) a way must be found to free the offerings of the small high school from the overshadowing influences of Matriculation and normal entrance courses.
- (d) courses included in the new program should possess an intrinsic value; not a value to accrue later to some individuals as the result of further study.
- (e) subject matter content should be so restricted that the teacher would have maximum freedom in the presentation of it; and the pupil could make "adequate assimilation through reflection and collateral reading."

Obviously the high school was no longer to serve as a screening agency to select students for entry into institutions of higher learning. This function while not abandoned completely was to be subordinated to the more general function of developing the potential of all students as far as possible through their participation in appropriate studies in the high school. It was implied then and later made explicit that the high school must concern itself with the affective and psycho-motor as well as the intellectual development of students.

The point of view set out in the foregoing prevails completely in the publications of all Departments of Education in Canada and is accepted by all respondents to this survey. There is a strong feeling however that the purposes of the high school program and the meaning of the high school graduation certificate are not well understood by the public. An Ontario Department of Education official writes concerning his Province, "The Secondary School Graduation Diploma is attainable by all secondary school students who achieve satisfactory levels in a wide variety of available courses. The intention is that the diploma recognizes that the student has completed a certain part of his educational experience. However, it does not describe that experience; that is the function of the Ontario School Record System, nor does it provide a guarantee that a student is ready for further education, or for employment. Each college officer and each employer will have criteria of their own."

While the Provinces differ in the means of achieving the purposes of secondary education, there is substantial if not complete agreement that the graduation requirement is intended to place general education within the reach of practically all students who enter the doors of the high school. It is assumed that adjustments can be made in

courses and programs within the graduation requirements to provide challenge without setting up insurmountable barriers.

Nothing in the foregoing however suggests that the career oriented student will be denied the chance to engage in those studies that relate to his career plans since the traditional courses deemed by university professors to be necessary preparation for university programs will still be available to him.

The usefulness of the High School Diploma to post-secondary institutions and to employers is questionable. The certificate says nothing to them except that the student has spent three or four years in a planned educational environment, not necessarily related to job entry skills or performance in academic subjects. In spite of this, most institutions recognize that there is value in encouraging high school students to follow a structured or at least a partially structured program in school, and they are willing to list the achievement of a high school diploma as a partial requirement for admission to their institutions.

There is still the problem of the employer who insists on demanding a high school diploma as a condition for job entry, when in fact this requirement is far above the demands of the job. Some principals have complained of this and have suggested that the high school diploma should be abolished in order to force employers to look at transcripts rather than to ask for diplomas, or alternatively that the high school diploma be in the nature of a school leaving certificate listing only subjects successfully completed together with standings achieved in each.

In addition to the questions that have surfaced regarding the usefulness of the high school diploma to employers and institutions of higher learning, there is the question as to whether it meets any personal needs of the students. Principals and the students themselves are probably the best judges in this area. The answer is YES. Both students and principals want a high school diploma, or at least some certificate giving visible evidence of what they accomplished in high school. Their reasons may be different, but both groups want it, and their preference is for a certificate issued by the Department of Education. This leads us to a consideration of the nature and form of the Alberta High School Certificate.

2. The Nature and Form of the Alberta High School Certificate

It cannot be said that consensus was reached on this matter by the public who chose to respond to this particular question. Some favored the idea of the same type of certificate for all, with actual subjects and standings recorded on the certificate. Some favored special certificates designating the particular programs completed by the students, and some favored the substitution of a School Leaving Certificate for the Graduation Certificate.

In attempting to evaluate differing opinions, all seemingly reason-

able, and all from well informed people one must seek guidance from the prevailing or accepted educational philosophy. In this case we must refer to the current goals of secondary education for Alberta. A most cursory examination of these reveals that if the goals for basic education for Alberta as reported in the position paper of the Department of Education in September, 1974, and as summarized in Appendix "B" of this report are deemed the appropriate basis of awarding a high school certificate, the diploma can in no way serve as a screening instrument for admission to institutions of learning. It is true that the goals encompass measurable skills and knowledge, but while these are important, they have not been given primacy. It seems abundantly clear that providing selection criteria for other agencies is not the chief concern in evaluation at the secondary level. If the goals are faulty, this is another matter, and beyond the scope of this survey, but as presently stated they make mandatory a clear distinction between the purpose of a diploma and the necessity for a transcript of marks representing evaluation in the cognitive and skill areas of the secondary program.

To those who have suggested that the information presently recorded on the transcript be transferred to the diploma, one might ask, "To what purpose?". While it brings about some small economy in paper, it would in no way simplify the total operation and would in fact tend to establish a primacy of goals which does not exist.

The idea of a School Leaving Certificate is intriguing. It meets many of the complaints voiced by students concerning the rigidity of the 100 credit requirement for graduation, and puts the onus squarely on the student to determine what he conceives to be a satisfactory program of study in terms of quality and quantity. As argued in other sections of this report, however there are still areas of public interests that transcend individual interests, and if goals are set, as they should be for secondary education, the credential issued should be evidence of the attainment of these goals.

The idea of distinctly different diplomas for different programs is also intriguing, but it encourages or requires a return to the system of tracking or streaming, which has already been discussed in this report (page 17) and discarded as unworkable. If tracking or streaming were not followed, there would have to be a proliferation of kinds of certificates that would lead to more confusion and less consistency between goals and paper credentials representing achievement of those goals.

Recommendations re Graduation Requirements and Diplomas

1. That the High School Diploma be retained, and issued by the Department of Education.
2. That the requirements for graduation be listed on the High School Diploma, but not the specific subjects and standings obtained by the student.

3. That a clear statement appear on the Diploma, that transcripts listing the subjects and standings attained by the student can be obtained on request of the student as required.
4. That the High School Graduation Diploma be dropped as a partial requirement for admission to a post-secondary institution, but retained as a preferred qualification.
5. That there be only one type of diploma for all graduates from high school.
6. That the Department of Education publicize each year advice to prospective employers of students emphasizing that the high school transcript rather than the diploma will provide them with information re achievement in specific subject and skill areas.

Constants vs. Optional Areas of Study

All respondents support the proposition that there are certain studies that should be required of all students irrespective of student interests and career plans. Oddly enough most independent schools and public schools which have clamored most insistently for change have, in their deviation from the norm, moved in the direction of more constants (for their particular diplomas) and for more specific or rigid guidelines for student selection of optional courses. This is not a case of developing tracking or streaming, but rather the imposition of a presumably more mature judgement as to what constitutes a reasonably well rounded program. Their deviation is more in process than content.

There is not only substantial agreement that there should be constants, but also very substantial agreement that the areas for compulsory study or participation should be as they now are in Alberta, namely English, Social Studies, Mathematics, Science, Health & Physical Education. Students were just as firm in designating these five areas. A fair number of students, while agreeing with the areas that should be designated for compulsory study, felt that the time requirements for English and Social Studies were too great.

The amount of school time devoted to constants varies among the Provinces from a low of 20% to a high of 53%, the median being 43% and the average 40.3%. In Alberta 33% of the graduation requirements fall in the compulsory area. To rank near the middle of a reference group is oftentimes comforting but a poor rationale for judging the rightness of one's position. We must seek other criteria of evaluation, and I think we must turn to the judgement of responsible and interested people and this we have in the consensus from the respondents, and the judgement of the students. To this we might add the opinions voiced in the Faure Report, a group of world leaders in education who by the way have listed economic literacy among the "musts" for all students.

In Alberta as in all Provinces, education is a Provincial responsibility. Increasingly the responsibility for financing education has been assumed by the Provincial Government. It seems doubtful indeed if the Province should simply leave the problems of program to individual school boards or the complete choice within programs to students. Surely there are areas of study where Provincial or even National interests must transcend those of individual or local interests. Basic literacy must be assured. One would be hard put to name areas of study with higher priority ratings for basic literacy than Communication, Social Studies, Mathematics, Science and Health & Physical Education.

To the student complaint from a minority group that they should not be required to take a subject because of lack of interest it must be insisted that in some matters, the interests of society are paramount. This does not of course rule out the possibility that the options within an area such as English or Social Studies are sterile in terms of relevancy, or that lack of interest stems from poor organization or poor teaching or both; but at the moment we are concerned with structure and must conclude that the structure of graduation program is both sound and necessary.

SPECIAL SUBJECT AREAS

Students more so than other respondents focussed their attention on special subject preferences when invited to respond on any matters of their concern. This is probably because their attention had been focussed upon subject preferences in the student questionnaire, but the open responses do provide some insight into their expectations of the school program.

English

43 students regarded the graduation requirements for English as excessive. It should be remembered however that this is 43 out of a sample of 1,543 students, and that 1,343 of this sample placed English highest among their priorities of subjects. In view of the primacy given to English by the students, and also complaints expressed by employer respondents re standards, the present requirement for graduation of 15 credits out of the 100 credits total required does not appear to be excessive.

Social Studies

Canadian History was given a fairly high rating by students and was given strong support by non-student groups. There was no disposition from either groups to make it compulsory.

Family Life & Sex Education, Economics, and Contemporary Problems

The high ratings given by the students to these areas is consistent with the oft repeated plea for more relevance in the high school

programs, and certainly consistent with the changed priorities of society. Illiteracy in any or all of the above areas could allow our society to drift aimlessly in areas of morality, production, distribution and environmental preservation, to mention only a few. It is obvious however, that neither students nor administrators wish these subjects to be imposed as compulsory, but they do wish them to be readily available.

Physical Education

While acceptable to the majority of students as a "constant", Physical Education was lowest in the list of preferred constants. Moreover while the value of the course was not questioned, the need to make the course compulsory was questioned by 27 students, by a few principals, and by a number of parents who saw fit to present individual briefs on the matter.

Most of the parent complaints were based upon specific cases of youngsters to whom Physical Education was anathema such as the over-weight boy or girl, or the athlete already engaged in much more strenuous physical activities.

Parents who know the exemption procedures resent the necessity to get medical certificates; some were unaware of exemption procedures; some feel unnecessarily embarrassed by having to make a case to obtain an exemption for their sons or daughters.

A substantial number of educators deplored the emphasis on highly organized competitive sports in the secondary schools. A strong plea was made by one complete group of principals for a change in emphasis to the development of interest in and skills for individual sports which will serve an individual throughout his life span.

RECOMMENDATIONS

Since this is not a curriculum study, attention will be focussed only on those curriculum areas that have been raised as matters of concern by a number of groups who submitted briefs in connection with the Diploma Study Project. Highly detailed specific recommendations in these areas would require investigation into the nature of the present course offerings, the choices available to students, the extent

to which their choices coincide with their interests as revealed by the student questionnaires, and the concerns expressed by several of the responding groups.

Because this kind of investigation was beyond the scope of the present study, the recommendations which follow are presented as propositions to be investigated, rather than specific actions to be taken.

1. English:

- a) That the time allotment for the compulsory English Language and Literature program remain un-changed at approximately one-seventh of the total credits required for a high school diploma.
- b) That from one to five credits of remedial English be available to students in grades X and XI, the total not to exceed five credits. (It should be understood that the term "remedial English" is used here to apply to all media of communication).
- c) That study of the more formal verbal means of communication be supplemented by appreciation, understanding and use of other media of communication.

2. Social Studies:

- a) That Consumer Education and Basic Economics be included as options within the Social Studies 10 program.
- b) That Canadian Studies be a compulsory unit within the Social Studies 10 program.
- c) That a course in Contemporary Problems be available at grade 11 or 12 level.
- d) That the economic content in teacher training programs for teachers specializing in Social Studies be up-graded in order that teachers may be adequately prepared to teach options in the economics field.

3. Family Life and Sex Education:

- a) That this program be up-graded and that the Department of Education sponsor seminars for teachers in charge.

4. Physical Education:

- a) That Physical Education 10 continue to be listed as a compulsory subject, but that the exemption of any student from the course be granted following the simple request of the parent, or of the student if he or she has reached the age of majority.
- b) That greater attention be given to the development of life-long recreational skills.

THE ALBERTA CREDIT SYSTEM

To recapitulate briefly, it is a system whereby a credit is based upon an achievement and a time component. Satisfactory achievement is determined by the teacher, while the time component of a credit is defined as a minimum of 25 hrs. instructional time per credit. The average subject in Alberta carries five credits. For graduation, a student must attain 100 credits, 33 to 35 of which are compulsory, the remainder subjects to the choice of the student. The question arises as to whether this concept of a credit is harmful to good education, good organization of schools, or both.

There is some evidence that time spent in the study of a subject in school has little direct relationship to the amount of knowledge and skill acquired by the student (1). Those respondents to the present survey who are closely associated with the public and separate schools admit to there being much empirical evidence at hand to support this statement. Despite this and an almost unanimous opinion voiced by other respondents to the survey, that time is of little importance to levels of achievement of students, there seems little disposition on the part of any respondents to remove the time component completely from the definition of a credit. Even principals whose schools follow a deliberately innovative style feel that some clear statement of an "average time" expectation for a credit is useful provided it is not rigid.

(1) Husen, Torsten, "Does More Time in School Make a Difference?" Saturday Night, April, 1972.

This ambivalence arises from the fact that most of the people in public education have been involved in the consideration of the goals of secondary education, and are acutely aware that while levels of knowledge and skills are not necessarily directly proportionate to time spent in school, some of the broader understandings, appreciations, attitudes and values which are important parts of educational growth, develop better through inter-relationships with others, all of which require time. The position taken by the A. T. A. on this matter is the one prevailing among most of the educators responding.

"To get the experience commonly involved in a high school education, a student may need to be in high school for X years, but this broad time component is certainly different in scope and effect than the delimitation of education to the intense degree specified in subject matter parcels of 2, 3 and 5 credits."

Some school staffs prefer the time component to remain as it is, others would like to have it listed as an "average expectation" to be reduced or exceeded through negotiation between the teacher and student. It appears to me that the latter position is completely defensible. Styles of learning and rates of learning, and of intellectual and social maturing should be accommodated. Staffs can best judge their capabilities to meet these needs and should be afforded the opportunity to do so.

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6
Many educators are more concerned with variability of credit allotments than with time allotments. They feel that the present 5 credit subject for example should be divided into 5 one-credit modules, or perhaps 2 two-and-a-half credit modules. The latter arrangement is not unlike some semestering systems in the United States where a course is simply divided into an (a) section, and a (b) section, each one complete in itself with respect to credit allotments. Either arrangement would provide much more flexibility in the scheduling of classes, and would, in the opinion of many, be a more logical approach to semestering than the present system of requiring that full courses be completed in each semester.

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The chief disadvantage in the modular system lies in the difficulties for students who transfer to schools not on that system. The difficulty might be overcome within Alberta by forcing all schools to follow the same pattern of organization, but the difficulties of transfers to other Provinces would remain. In any case the enforcement of a single organizational pattern would be repugnant to professionals and the general public alike. However, the difficulties of transfer may not be as critical as generally believed.

Some Alberta schools have followed substantially different organization patterns, with the tacit approval of the Department of Education. They report that transfers both in and out have not caused exceptional difficulty for the students concerned. Transfer information and recommendations must be more detailed and specific however. The

few reports that have been made on this matter are hardly sufficient warrant to sweep the problem under the rug, but they are an indication that staffs who believe in the greater flexibility offered by modules can find ways of overcoming or at least lessening problems arising therefrom.

Permitting flexibility in the time component of a credit is very simple. A change of wording in the present regulations is all that is required. Setting forth an "average time" component may vary the time as necessary to accommodate student preferences, rates of learning and styles of learning.

The variable credit concept requires adjustments of a more formal nature. If modules of one credit are authorized, complete flexibility is assured. Schools which for one reason or another are incapable of rapid change may simply organize on the same basis as before with the standard 5 credit assignments and others remaining precisely as now specified. Since most Alberta schools now operate on the semester plan, many would probably opt for a division of 5 credit subjects into 2 1/2 modules per semester. Schools opting for a quarter system may distribute models in keeping with this type of organization.

Alberta education has suffered in the past from trying to impose new regulations and policies on all schools irrespective of their size, resources and readiness. The implementation of the foregoing ideas would provide for growth when conditions for growth are established.

RECOMMENDATIONS

1. That a modular system of one credit modules be established and made optional for all secondary schools in Alberta.
2. That the time component of a module or credit be established as an average expectation rather than a minimum as now stated in regulations.

WORK STUDY, WORK EXPERIENCE AND SPECIAL PROJECTS

Work Study

The Work Study program is simply an opportunity afforded students to supplement their theory with practical experience. No special credits are assigned to this outside experience since it is considered an important part of the course for which credits are assigned. This arrangement has met with favor from all respondents including students. The A. T. A. feels that since such arrangements are simply logical extensions of good teaching, no special recognition or mention should be made of this in a discussion of credits since it constitutes a normal tool in the teacher's repertoire.

Work Experience

Work Experience with high school credits for same is considered useful and acceptable by most respondents to this survey, but there is strong dissatisfaction in two areas, the first of which in my view is the most significant; namely, that schools do not have adequate personnel for adequate planning, co-ordination and supervision of the programs. It is argued that because of this lack the program in many instances has become a travesty of good education. Many feel that unless this situation is remedied the program should not be offered. I am fully convinced of the validity of this position. A second complaint is that the term "work experience" has little relationship to current goals of education unless the experience can be tied to some label or course which designates the nature of the experience.

Special Projects

Teachers and principals in general appreciate the opportunities afforded by this program to increase their capability to provide for self-directed study and individual interests, and to grant high school credits for satisfactory attainment in this area, but too many complaints have been received about the operational aspects of the program to warrant any feeling of complacency concerning the operation of the program. The areas of weakness are obvious and almost identical to those presented under the Work Experience program:

1. The lack of personnel to provide adequate supervision, control and evaluation.
2. The failure to define in broad categories at least, the types of acceptable projects, and to allow for more descriptive labelling for transcript purposes than the label "Special Projects".

Extension of this practice is opposed by practically all respondents, even from the great majority of those who are already involved in the organization and operation of such activities. In the case of swimming and figure skating, the sponsors of these organizations felt that there might be a possibility of assigning credits to these activities under "Special Projects", in which case they agree that the activities should be subject to school control. There was no strong feeling however, that the matter was of great importance.

The problem, and it appears questionable if there is one, can be examined from the broader perspective of the purposes of education, and also from what are generally regarded as accepted values in a democratic society.

The public school is an institution which for the present and for a long time in the future, must provide mass education, and must of necessity limit its offerings to areas of learning which require high

organization, publicly accepted goals and purposes and a high degree of commonality. Special talents and interests of students can only be accommodated in broad categories rather than in individual settings. There must always be in any society hundreds of services to supplement those offered by the schools, but these will have to be matters of private rather than public concern for organization and financing.

From the standpoint of democratic values, surely we have not reached the stage where a youngster must receive pay in the form of high school credits for participation in activities in which participation in itself is a privilege, and its own reward.

A minor problem exists for the student of exceptional talent in a particular activity, and who undergoes a rigorous training schedule to develop that talent. In many cases this cannot be done without seriously interfering with time requirements for high school completion. This situation can be handled in several ways:

1. Acceptance by the student and his parents of the right to establish life priorities and to endure the consequences of their choice.
2. By waiving the time component in favor of a performance component for high school credits.
3. By permitting the school principal to recognize the activity as a partial requirement for school credits in a related school subject.

The Department of Education should provide guidelines but should not be involved in the transactions in (2) and (3).

I am satisfied that the Work Experience programs and the Special Projects can be very useful additions to a secondary school program. Much has been said and written concerning the necessity for closer liaison between the world of work and the somewhat protected and artificial environment of the school. There is certainly consensus among the respondents that these extensions to the usual school programs are worth salvaging, and I use the term deliberately. Implementation of the following recommendations are critical to the survival of the programs:

1. Support must be obtained for staff to service these activities. A simple re-distribution of the staff by the school administration to accommodate these activities will not suffice, since it would serve only to dilute service to other important areas of the school program. Large staffs will certainly need school-based personnel. Smaller schools may be serviced by centrally (Provincial or local) based staff.
2. Special training through work shops and seminars must be provided for personnel involved in the programs.

3. A more meaningful way of labelling credits for these experiences should be implemented.
4. There should be no further expansion of any of these areas until these recommendations are fully implemented.

NON-SCHOOL ACTIVITIES

Many students engage in out-of-school activities in sport, drama, music and other areas of interest, all of which contribute in some measure to their educational growth. Some of the activities are carefully planned developmental sequences which lead to some form of certification following attainment of national or provincial standards as in the case of music; others are engaged in simply for enjoyment and personal growth; still others, more particularly in sports, are highly organized individual or team activities, highly competitive in nature through which the talented and highly competent emerge through various levels as winners, and with future career possibility in the activity.

The only non-school sponsored and supervised activities which are granted high school credits at present are music, which is recognized in a few Provinces, and religious studies, which is recognized in British Columbia. From time to time requests have reached the schools and the Department of Education in Alberta to extend recognition for credit to other activities.

RECOMMENDATIONS

1. That no extensions be made to present practices re recognition for non-school activities for high school credits.
2. Retain the present provisions for recognition of music, but only as a substitute for credits in music offered in the school program.
3. Prepare guidelines for principals to negotiate special cases.

EVALUATION

Brief reference was made to this problem in Chapter IV, but the matter is of sufficient importance to warrant recommendations:

Fears were expressed by most respondents that while external examinations once provided some evidence of the performance levels of students in various areas of instruction, there is little left in the nature of an accounting process, either to assure the public that the quality of education is being maintained or to alert them to the deterioration of quality. This is a legitimate concern and one that requires immediate attention.

Those who believe that substantial improvement of the teaching force

is the most significant factor in improving the quality of education, argue that externally imposed examinations restrict the true professional from pursuing the broader goals of education which transcend "the memorizing of information to meet the requirements of the test makers". To these people there can be no return to the pattern of external examinations that existed.

Those who believe that the public has a right to know whether the quality of education is being maintained, deteriorating or improving, at least in its measurable aspect, are convinced that in the absence of external examinations, there must be some neutral agency to continually monitor quality of education.

If we can assume, that the universities are not so much interested in having a ready made selection tool available, as they are in ensuring that high school graduates have successfully met real intellectual challenges in their high school careers, it would appear that the interests of universities, teachers, students and the general public converge in the area of quality control. This can be obtained in either of two ways: (1) accreditation of senior high schools by meeting rigorous qualifying criteria or (2) the establishing of present performance levels, and the systematic use of sampling techniques to measure quality. *

The accreditation approach has been tried in Alberta, but the procedures were cumbersome, and criteria for evaluating the quality of education offered were more related to teaching than to learning. There is no reason to suppose that the same kinds of procedures would be more successful or acceptable today. }

The idea of quality control by periodic sampling of the product appears to offer more chance of success than accreditation. The sampling methods, the frequency of testing, the choice of subjects to be tested and the nature of the tests should be determined by a Board set up for the purpose.

RECOMMENDATIONS

1. That a Provincial Board be set up to systematically monitor quality in specific areas of the high school program.
2. That the Board be made up of trustees, teachers, the Department of Education, the Universities, Labor and Management.
3. That base lines or bench marks be established for each area to be evaluated, on the basis of present achievement norms.
4. That reports of findings be made public on a systematic basis.

C H A P T E R V I I

CONTINUING EDUCATION

Before presenting the brief of the Alberta Association for Continuing Education, it will be useful to review the present arrangements to accommodate adults who need to have high school diplomas or some equivalent standings to meet admission requirements for their further education, or simply as credentials supporting applications for jobs.

It was early recognized that to force an adult through the exact pattern of studies required of a regular high school student was to ignore the fact that the adult's maturity and experience were as valuable to his preparation for further education as many of the first and second year courses acceptable in the regular high school program, and indeed some of the third year courses.

In 1971, the Minister of Education for Alberta announced changes in the existing requirements for adults to achieve high school graduation status or its equivalent. Under these regulations there was still an insistence that the graduation certificate be based upon completion of 100 credits of study, but there was a fairly generous allowance for the conversion of non-academic and non-school experiences into credits (Appendix E). Diplomas issued pursuant to the 1971 regulations are known as Adult High School Equivalency Diplomas. The regulations of 1971 were regarded as a step forward by those in charge of continuing education in Alberta, but an examination of the correspondence between the directors and officers of the Alberta Association for Continuing Education and Department of Education officials indicates consensus that the changes did not go far enough.

In 1969, Nova Scotia launched a somewhat similar program. It is reported by the Director of Adult Education for Nova Scotia, that the service has been very well received, and that there is evidence that the program has been the means for many adults to gain admission to further training programs. As in Alberta, graduates of the program receive High School Equivalency Diplomas, but the requirements for this diploma differ substantially from those in Alberta, in that reliance is placed upon the use of tests of general educational development, in which there is an attempt to measure "not detailed descriptive facts, but the intellectual skills which are the long-term outcome of a sound education". Alberta ties its requirements for adult certification much more closely to the requirements for the graduation of regular high school students.

These major differences between the requirements for adult certification in Alberta and Nova Scotia assume some significance

later as we discuss the brief of the Alberta Association for Continuing Education. This brief purports not only to present the point of view of Association members, but also the views of many agencies which deal with individuals who are attempting to obtain either an equivalency diploma or an Alberta High School Diploma.

BRIEF OF THE ALBERTA ASSOCIATION FOR CONTINUING EDUCATION

1. Remove the word "equivalency" from the Adult High School Equivalency Diploma.
2. Educators at the local levels should be able to evaluate additional credits which are to be gained to complete the high school diploma for adults.
3. There should be a change in the maximum number of credits given for courses taken from approved adult education courses taken under recognized agencies. This would be in addition to 5 credits for private study, and 5 for extensive travel.
4. A person in possession of journeyman's papers should receive a minimum of 40 credits for his training; (i.e., an automobile mechanic should receive credits for Automotives 12/22/32). Similarly someone experienced in business should receive credits for successful completion of some standardized tests; their working experience should also be considered.
5. A maximum of 5 credits should be allowed for proven and extensive community involvement by the applicant.
6. The requirements of 100 credits to attain the present equivalency certificate should be reduced to at least 75, and possibly to 50.
7. Some kind of a testing program should be available for testing competence in basic subject areas.

COMMENTS

Item 1

The question of the Equivalency Certificate vis a vis the regular High School Certificate was discussed at some length with officers of the Continuing Education Association, and with high school principals who are involved in teaching adult students. All have very strong convictions on this matter and argue that the Adult Equivalency Diploma is invariably rated as a second class diploma in comparison with the High School Diploma, by admissions officers of post secondary educational institutions, employers and recipients of the diplomas. They argue also that the High School Diploma is now a broad umbrella covering many diverse groups of experiences offered by the schools, and should be broad enough to include one more program, whose objectives are even more direct and clear.

From the standpoint of admissions officers and prospective employers as represented by the Alberta Federation of Labor and the Alberta Chamber of Commerce, there seems no great concern about the label attached to the completion of a high school equivalency program.

In my view the label "Equivalency Diploma" is very logical. Its meaning is clear and unequivocal. It denotes a program that is not the same as the high school program, but is considered its equal in all respects. It may be that in the final analysis realism must triumph over logic, but I must opt for retention of the present label.

Item 2

Evaluations might well be performed at the local level if clear guidelines are provided by the Department of Education.

Items 3, 4, and 5

The common thread running through these three suggestions is the desire to expand the areas of experience that can be recognized as substitutes for school experiences or high school credits.

With respect to No. 3, and examination of the published lists of courses offered by adult education agencies reveals that there are many courses offered whose contents can readily be equated to similar courses in the high school program. It should not be difficult to set up Provincial criteria and guidelines for evaluating such courses.

With respect to No. 4 there should be no difficulty in equating journeyman's standing to credits in vocational and technical subjects. In like manner, business education credits could be assigned transfer credits.

With respect to No. 5 there is certainly precedent within the high school program for recognition of community services for credits.

The function of the Department of Education in the evaluation process for credits earned for non-school subjects should be confined to establishing criteria and guidelines.

Items 6 & 7

With respect to No. 6 it would seem that it would be quite reasonable to expect the adult to accumulate 100 credits, provided the credit allowance for non-high school subjects are expanded.

With respect to No. 7 there would be value in opening up another route to the Equivalency Certificate.

RECOMMENDATIONS

1. That the name "Adult High School Equivalency Diploma" be retained.
2. That the certificate be issued by the Department of Education.
3. That evaluation of non-school credits be the function of the local education authorities under clear guidelines of the Department of Education.
4. That the number of credits gained through classroom instruction be reduced from a minimum of 60 to a minimum of 50.
5. That credits for age be discontinued.
6. That credits for adult education courses be raised from a maximum of 15 to a maximum of 25.
7. That certificates of accomplishment, obtained through non-school agencies be recognized as trade-offs for high school credits (under additional high school course) if the area of accomplishment is highly related to a school subject. Such certificates as journeyman certificates and business education are cases in point.
8. That the 100 credit requirement be left intact for this route.
9. That a new and alternative route be established for the attainment of the Adult High School Equivalency Diploma, requiring of applicants minimum performance in power tests relating to Mathematics, Science, English and general knowledge.

B I B L I O G R A P H Y

Canadian Education Association, "Requirements for Secondary School Leaving Certificates and for Admission to University and Teacher Training". April, 1974.

Alberta Department of Education, "Goals for Basic Education Grades I - XII", 1974. Annual Reports 1928-1972.

Canadian Commission for UNESCO, "Summary of the Faure Report, International Commission on the Development of Education." January, 1973.

Rusnack, Terrence Anthony, "Effects of Accreditation on Grade XII Matriculation Marks in Alberta." Thesis submitted as partial requirement for M. A. Degree, U. of C., December, 1973.

ARTICLES

Buell, Howard L., "Should the High School Diploma Requirement be Discarded?" Adult Leadership, June, 1972.

Howard, Alvin W., "The Carnegie Unit - Is this Bugaboo Still With Us?" The Clearing House, November, 1965.

Hamilton, Norman K., "What Can be Done About the Carnegie Unit?" Educational Leadership, January, 1966.

Lindbloom, Keith & Navarrette, Hector, "Developing Relevant Curriculum" Journal of Secondary Education, February, 1971.

STUDIES BY GRADUATE STUDENTS

Germshaid, R. D., "The Carnegie Unit and the Alberta High School Diploma", U. of A., August, 1974.

Horricks, Jean, "Alberta Schools 1902 - 1938", July 30th, 1974.

A P P E N D I X A

HIGH SCHOOL DIPLOMA STUDY FRAME OF REFERENCE

For the guidance of study groups, I shall try to delimit the problem, first by indicating what the study does not purport to do, and secondly by indicating what it does purport to do.

A. It does not purport to:

- (1) investigate admission requirements of post-secondary educational institutions.
- (2) evaluate the content of particular courses.
- (3) examine evaluation methods for either examination subjects or non-examination subjects.
- (4) cast out the Carnegie Unit as a measuring instrument, although the usefulness of the unit, and that of some of its derivatives will be examined in relation to the purposes served by the high school diploma.
- (5) examine the credentials issued for completion of elementary or junior high school programs.

B. The study does purport to:

- (1) Examine the general requirements for the high school diploma as set forth on page 32 of the High School Regulations for 1974-75, these being generally applicable to the 1973-74 school year. This will include the choice and adequacy of the broad categories represented, the selection of subjects within the categories, and the weighting assigned to both categories and subject areas within the categories. (See footnote page 5 of this guide.)
- (2) examine the credit system both from the standpoint of its effect upon the educational program, and its usefulness for admission purposes to job entry and into other educational institutions.
- (3) consider the nature and form of the High School Diploma.
- (4) consider the needs of adult students; e.g., How can they best satisfy admission requirements to institutions of higher learning, and what kind of paper credential should they have?

PROCEDURES TO BE FOLLOWED IN THIS STUDY

With many diverse groups participating in this study, it

is doubtful that a straight questionnaire technique would serve a useful purpose.

Position papers from various institutions and associations would be most useful. Accordingly while I will develop more detail in the areas of concern, and will pose some rather specific questions, the question is intended to provoke a reasoned response rather than a categorical answer.

PURPOSES OF THE HIGH SCHOOL DIPLOMA

Paper credentials are accepted in our society as fulfilling both an individual and a social need. Even though we may think of it as one of his less noble needs, the individual appears to want visual evidence of his accomplishments in most of his fields of endeavor. Office walls, dens and game rooms give ample testimony of this need. Society values paper credentials as guarantees of competence either general or specific.

It can be argued, that testing techniques have been refined to the point where many employers and college admission agencies or committees would now prefer to give tests of their own rather than accept a paper credential from another institution. Even if it could be shown that this tendency is on the increase, it is doubtful that it would be economically feasible for small institutions to do their own testing for admission, and there still would remain the problem of meeting the personal and individual needs of students for a symbol of accomplishment.

The high school certificate, from a social point of view is, or ought to be, an indication that a student has achieved what the State or Province conceives to be an absolute minimum of preparation for responsible citizenship. States or Provinces usually preface their senior high school programs of study with a statement of the "Aims for Education" for that particular State or Province. Except for the communist countries, the aims for secondary education are remarkably similar throughout the world. In the most general terms the State wants to be sure that high school graduates can live in harmony with themselves, their neighbours and their environment and that they have opportunities to develop purposeful goals for living. These aims are stated more completely on Pages 1 and 2 of the High School Regulations.

To achieve these aims, the educational programmer for senior high schools must select judiciously from the whole realm of human experience and human knowledge, a group of educational experiences calculated to do the job within a three or four year span of time. The programmer must also be well aware of the capabilities of the students and the extent of their prior educational experiences. He must also be well aware of present societal needs and trends for the future. His first job is to structure the broad areas of human

experience and knowledge that should be represented in the program; his next job is to flesh out this outline with specific subjects and activities within the categories.

The skeletal structure of the requirements for an Alberta high school diploma is presented on Page 32 of the Alberta Senior High School Regulations. It is this structure we are mostly concerned with in this study, although our concern does reach at times to what we hang on the bones of this structure.

The high school diploma, which is granted on completion of the requirements laid down in this structure is not only a symbol of accomplishment, but in many cases a key to unlock doors to further education or to job opportunities.

Study Questions Relating to B (1) of the frame of reference

1. Should there be compulsory and optional areas in the structure?
2. Do you think the compulsory areas should be increased or decreased?
3. Is the weighting given to the various academic areas defensible?
4. Should Work Study (page 26) be curtailed, expanded, subjected to greater or lesser controls?
5. Should Special Projects (page 24) be curtailed, expanded, subjected to greater or lesser controls?
6. To what extent should out-of-school activities, under control and supervision of non-school personnel be recognized for credit for diploma purposes?
7. To what extent if any should private study or research be given credits for diploma purposes?
8. Should there be more specificity in the compulsory academic areas; e.g. Should there be a compulsory course in Canadian Studies, or Contemporary Problems, rather than a requirement of one course of Social Studies in addition to Social Studies 10?

The example given in 9 is not intended to obscure the fundamental nature of the problem which can be posed as a series of alternatives:

Centralization vs. Decentralization of Curriculum

Local & Individual Interest vs. National or State Interest

Rigidity vs. Flexibility of Curriculum Construction

Selection of Programs vs. Selection of Courses.

Study Questions Relating to B (2) of the frame of reference

1. How important to good education is the requirement that a student must put in a definite amount of time in a subject before being granted a credit or credits for it?
2. Does the credit system as we know it restrict good planning and organization within the school?
3. What alternatives to or adaptations of the credit system are recommended from the standpoint of good education and good organization?
4. Can the high school diploma be made more useful as an admission requirement for employment or for further education, by a different accounting arrangement than the present credit system? What method is recommended?

Study Questions Related to B (3) of the frame of reference

1. Should the diploma carry some designation indicating the pattern or program followed within the broad general requirements for the diploma?
(at present transcripts are available for detail)
2. Should there be different diplomas for different patterns of study?
3. Should there be levels of diplomas according to standards of achievement?
4. Would it be desirable to strive for uniformity of definitions among the various provincial departments of education insofar as credits and units are concerned?

Study Questions Related to B (4) of the frame of reference

1. What trade-offs for high school credits should be possible in recognition of the maturity and experience of adult students?
2. Is it desirable to issue the regular high school certificate, if obtained by a combination of subject and trade-offs?
3. Should certificates for adults, either regular or equivalency types, be issued by the local authority providing the courses or by the Provincial Department of Education?
4. Should such certificates list the bases upon which they are awarded?

REMEMBER

The questions are merely guidelines. A clearly stated position, backed by argument and/or evidence will be much more useful than a series of categorical answers to questions posed under Section B of the frame of reference.

"High School Handbook"

Some groups have handbooks of 1972-3 and some of 1973-4. Some have the recently published 1974-75 issue. If your handbook predates 1974-75, the pages will differ somewhat, but the topics will be easily found.

A P P E N D I X B

SUMMARY OF THE GOALS OF BASIC EDUCATION FOR ALBERTA

GRADES I - XII

1. Learn to be a good citizen.
2. Learn about and try to understand the changes that take place in the world.
3. Develop skills in communication.
4. Learn how to organize, analyse and use information in a critical and objective manner.
5. Learn to respect and get along with others.
6. Learn about the world of work.
7. Develop management skills.
8. Develop a desire for learning.
9. Practice and understand the ideas of health and fitness.
10. Appreciate culture and beauty in the world.
11. Gain in basic education.
12. Learn how to use leisure time.

QUESTIONNAIRE FOR SENIOR STUDENTS

RE

THE HIGH SCHOOL DIPLOMA

HELP BUILD A BRIDGE FOR THOSE WHO FOLLOW!

Of course you are too busy preparing for exams to write a whole program of studies for the high school,

but

You can help the program planners if you will take a few minutes to play a little curriculum game. It is guaranteed to be short, interesting, and useful.

It is a bit like the game of Monopoly. You have 13 red tokens and 6 black tokens to spend or place in the spaces provided. You can forget about the black ones until you have used all the reds. All your reds will be used up when you complete Section B.

You can easily remove the tokens from the strip by lifting them up with your finger nail. You don't have to lick them to make them stick. They are self-sticking. Just press the tokens in the spaces you select and they will stick. Don't remove the token from the strip until you need it.

There are four sections to the questionnaire - A, B, C, and D. Complete each section before proceeding to the next.

SECTION A

To earn a high school diploma you must complete satisfactorily subjects totalling 100 credits. Some of these subjects are compulsory. Every student must take them no matter what his career plans are. Some subjects are optional; some credits may be earned for satisfactory completion of certain kinds of "out of school activities".

In this survey we are mostly concerned about what subjects you think should be compulsory.

There are ten general curriculum areas listed below. Place a red token in each of five areas which you think should be represented in the compulsory group of studies. Be sure to use five red tokens.

Science	<input type="checkbox"/>	Foreign Languages	<input type="checkbox"/>
Social Studies	<input type="checkbox"/>	Health	<input type="checkbox"/>
Communications (Language and Literature)	<input type="checkbox"/>	Mathematics	<input type="checkbox"/>
Fine Arts (Music, Art, Drama)	<input type="checkbox"/>	Phys. Ed.	<input type="checkbox"/>
Commercial (Typing, Shorthand Stenography, etc.)	<input type="checkbox"/>	Vocational and Technical	<input type="checkbox"/>

So you see, Section A was as simple as falling off a log. We now have eight red tokens left. We must use them all on Section B on the next page.

SECTION B

The subjects in Section B are more specific than those in Section A. Select the eight which you think are the most important of those listed, for every student to take in high school

Place a red token after each of the eight.

Bookkeeping	<input type="checkbox"/>	English Literature	<input type="checkbox"/>	Chemistry	<input type="checkbox"/>
Electricity	<input type="checkbox"/>	English Language	<input type="checkbox"/>	Music	<input type="checkbox"/>
Home Economics	<input type="checkbox"/>	Typewriting	<input type="checkbox"/>	Drama	<input type="checkbox"/>
Consumer Education	<input type="checkbox"/>	Physics	<input type="checkbox"/>	Biology	<input type="checkbox"/>
Social Studies	<input type="checkbox"/>	Mathematics	<input type="checkbox"/>	Psychology	<input type="checkbox"/>
Basic Economics	<input type="checkbox"/>	Geography	<input type="checkbox"/>	French	<input type="checkbox"/>
Commercial Law	<input type="checkbox"/>	Sociology	<input type="checkbox"/>	General Science	<input type="checkbox"/>
Family Life and Sex Education	<input type="checkbox"/>	Industrial Arts	<input type="checkbox"/>	Contemporary Problems	<input type="checkbox"/>
		Canadian History	<input type="checkbox"/>		

Really that wasn't much more difficult than Section A. If you have nothing more to say you can throw away your black tokens and hand in your paper, but don't be hasty. Section C is where the fun begins.

SECTION C

If you agree very strongly with any one or two of the statements below, place a black token after the statement or statements. Choose not more than two statements - please. Now here is the catch. For each black token you use here, you will have to black out a red token in Section B. Just stick a black on top of a red. Of course, the statement must be very important to you to cause you to black out something you have already chosen.

1. French should be compulsory for all. ☐
2. Students should choose between complete programs rather than from a list of subjects. ☐
3. More opportunities should be given to students to earn high school credits for educational activities carried on outside of school. ☐
4. We should have fewer compulsory subjects rather than more. ☐
5. We should be able to write a final test on a subject when we are ready, instead of putting in a prescribed amount of time. ☐

Now you have at least two blacks left - maybe more. You can, of course, throw them away and pass in your paper, but maybe SECTION D is the most important of all.

SECTION D

If there is something about the requirements for a high school diploma that really bugs you - some requirement you don't like or some requirement that ought to be made, here is your chance to put your opinion on record, in the space below. Seems silly, but we want you to place a black token after the statement - but be sure to black out another red in Section B.

☐

Now, throw away the rest of your tokens and hand in your paper.

CURRICULUM WORK IS SUCH A BOTHER - ISN'T IT?

RESPONSES TO SECTION A OF QUESTIONNAIRE

152

	Winston Churchill Leithbridge.	Bishop Carroll	Bishop Grandin	Henry W. Wood	Crescent Heights	Lindsay Thurber	Ernest Manning	Grande Prairie	Archbishop O'Leary	St. Joseph	Eastglen	Jasper Place	Ross Sheppard		
Number of Responses	112	113	119	139	120	114	111	71	113	68	78	102	131	152	1543
Science	89	95	118	132	103	109	95	63	84	59	70	85	106	128	1336
S. Studies	103	97	101	113	98	105	78	58	101	51	64	79	107	131	1286
Communications (Lang & Lit.)	99	94	109	128	107	97	101	57	99	53	66	88	107	140	1345
Fine Arts (Music, Art Drama)	30	31	24	21	17	20	18	14	13	15	11	17	18	31	280
Commercial Type, Short-hand, Stenog)	15	13	14	13	24	3	27	14	18	7	11	19	32	14	224
Foreign Languages	25	35	32	39	27	24	23	24	40	19	42	28	37	78	473
Health	28	13	17	20	15	12	10	16	27	7	13	8	30	21	237
Math.	84	88	117	125	104	111	104	61	98	65	65	87	112	120	1331
Phys. Ed	60	77	72	73	72	77	66	41	71	46	44	48	68	74	909
Voc. & Techn'l.	36	22	22	25	35	32	34	16	21	11	5	53	39	23	374
RESPONSES TO SECTION C OF QUESTIONNAIRE															

	Winston Churchill Leithbridge	Bishop Carroll	Bishop Grandin	Henry M. Wood	Crescent Heights	Lindsay Thurber	Ernest Manning	Grande Prairie	Archbishop O'Leary	St. Joseph	Eastglen	Jasper Place	Ross Sheppard		
Question 1.	7	12	6	10	6	5	8	8	11	4	11	4	11	15	118
Question 2	21	10	23	16	24	14	3	4	12	16	11	14	19	6	193
Question 3.	53	66	43	67	57	56	51	47	37	31	25	47	39	55	674
Question 4.	24	22	16	28	28	36	24	25	29	21	14	11	28	42	348
Question 5.	43	58	70	21	33	21	35	16	25	20	20	31	45	44	482

APPENDIX D (continued)

RESPONSES TO SECTION B OF QUESTIONNAIRE

	Bishop Carroll	Bishop Grandin	Crescent Heights	Ernest Heights	Lindsay Manning	Veeville	Grande Prairie	St. Joseph	Jasper Place	East Glen	Ross Shepard				
No. of Responses	112	113	119	139	120	111	114	71	113	62	78	131	102	152	1543
Bookkeeping.	15	14	8	7	16	13	9	13	27	10	5	12	8	9	166
Electricity	7	4	3	0	4	9	2	10	5	1	1	2	5	11	64
H. Ec.	22	20	16	18	28	13	7	7	12	12	10	23	16	10	214
Consumer Ed.	59	58	44	66	71	50	63	41	50	32	44	66	48	69	(5) 761
S. Studies	78	84	89	98	75	66	63	35	86	44	49	84	57	71	(5) 979
Basic Economics	32	47	30	56	46	37	40	11	25	17	12	29	26	67	477
Com'l Law	34	33	34	26	20	30	27	26	31	16	15	41	26	27	386
Family L. & Sex Ed.	68	71	66	59	58	57	46	48	69	36	48	75	67	75	(4) 843
Eng. Lit.	30	52	41	69	69	27	38	30	44	14	26	47	35	78	600
Eng. Lang.	92	100	105	99	102	93	68	55	95	52	63	106	82	110	(3) 1222
Typing	19	21	22	26	23	23	15	22	19	12	21	28	14	13	278
Physics	26	17	21	45	22	23	16	15	28	18	10	16	26	21	304
Math.	76	91	118	112	109	103	94	55	92	66	63	109	86	111	(1) 1276
Geog.	6	8	11	11	12	7	6	3	12	5	3	10	7	16	117
Sociology	26	36	11	29	21	18	32	24	31	13	19	28	16	52	356
Ind. Arts	17	10	25	14	13	20	11	19	12	10	7	16	39	18	231
Can. Hist.	57	57	74	54	40	34	15	15	53	31	40	62	37	51	(8) 620
Chemistry	13	40	47	66	42	28	35	30	20	27	24	40	33	49	494
Music	9	28	4	7	1	5	3	11	15	4	8	11	8	10	124
Drama	6	7	4	17	5	1	12	3	4	3	3	4	9	10	82
Biology	45	64	79	94	63	54	57	33	25	26	40	50	45	88	(6) 753
Psychol	43	39	23	29	38	42	14	24	36	24	18	30	31	38	399
French	26	26	22	38	20	26	17	18	35	17	27	38	15	54	379
Gen. Sci.	46	29	44	39	46	57	38	19	52	31	33	65	40	49	588
Contemp. Problems	58	67	54	90	56	51	43	23	39	23	34	60	47	74	(7) 719

A P P E N D I X E

PROVINCE OF ALBERTA

THE ADULT HIGH SCHOOL EQUIVALENCY DIPLOMA

(Revised April, 1971)

To gain a High School Equivalency Diploma a candidate must present one-hundred high school credits gained as set forth below.

- A. A minimum of 60 credits gained through classroom instruction in a school or other institution authorized by the Department of Education to grant credits in recognized senior high school courses, or through high school courses offered by the Correspondence School Branch, as follows:

- | | |
|--|------------|
| 1. a high school course in mathematics | 5 credits |
| 2. a high school course in science | 3 credits |
| 3. English 30, 33 or 36 | 5 credits |
| 4. one other Grade XII course | 5 credits |
| 5. additional high school courses | 42 credits |

- B. Additional credits which, when added to those gained according to A above total at least 100, as follows:

- | | |
|--|------------|
| 1. additional high school courses | |
| 2. a maximum of fifteen credits for maturity according to the following scale: | |
| Ages 21 - 24 (inclusive) | 5 credits |
| Ages 25 - 29 (inclusive) | 10 credits |
| Ages 30 and over | 15 credits |
| 3. a maximum of fifteen credits for approved adult education courses under recognized agencies (e.g. public colleges, institutes of technology, extension divisions of universities, adult evening classes). | |
| 4. a maximum of five credits for extensive travel. | |
| 5. a maximum of five credits for extensive reading or private study. | |